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ANNUAL REPORTS

OF THE

Officers of State

OF THE

STATE OF INDIANA

ADMINISTRATIVE OFFICERS, TRUSTEES AND SUPERINTENDENTS OF THE
SEVERAL BENEVOLENT, REFORMATORY AND EDUCATIONAL
INSTITUTIONS, AS REQUIRED BY LAW TO BE
MADE TO THE GOVERNOR

FOR THE

Fiscal Year Ending September 30, 1907

AND THE

Calendar Year Ending December 31, 1907

VOLUME II

BY AUTHORITY

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING,
1908.

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PREFACE.

STATE OF INDIANA,
OFFICE OF SECRETARY OF STATE,
INDIANAPOLIS, October, 1908. }

In accordance with the requirements of the laws of the State, the several administrative officers of the State and the Trustees and Superintendents of the Benevolent, Reformatory and Educational Institutions thereof have submitted to the Governor and filed in the Executive Department the reports required of them for the fiscal year ending September 30, 1907, and the calendar year ending December 31, 1907, respectively, which have been entered of record in the order of their reception and delivered to the Secretary of State for publication under the order of the Board of Commissioners of Public Printing and Binding.

One thousand copies of such reports are now bound in two volumes and issued to the officers and persons designated by law to receive them. The usual number of copies of each report have also been bound in pamphlet form and delivered to the responsible officer or superintendent of each institution, for distribution in such manner as they may deem for the best interest of the State.

HARRY SLOUGH,
Clerk Bureau of Public Printing.

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TWENTY-SIXTH
ANNUAL REPORT

OF THE

State Board of Health
of Indiana

FOR THE

Fiscal Year Ending September 30, 1907.
Statistical Year Ending December 31, 1907.

TO THE GOVERNOR.

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.
1907.

The method adopted for presenting the death statistics is that known as "The International Classification System." This system is used by the United States Census Bureau and by all the registration states.

SANITARY WORK.

The State Board of Health has been active and made strong efforts to awaken interest in sanitary matters, and has tried hard to see to it that the health laws were enforced. As a result, there has been an increasing demand upon the Board for aid and information. Requests are almost daily received, asking that the Board pay visits and give advice in sanitary matters, or solve some sanitary problem which has arisen. As far as possible, the Secretary or some member of the Board has answered these calls in person. To answer all such calls in person would take all of the Secretary's time and also considerable time of each member of the Board. This is evident, when it is known there were 283 calls from the people in 1907 for personal visits. When it is impossible on account of distance and time involved, to meet these calls for personal visits, letters of explanation and advice are written. If the demands of the people for personal aid from the State Board of Health are to be met, the authority to employ and the means to support one or two deputy State health officers, must be given. Very few physicians have studied the branch of medicine known as hygiene, and therefore it very frequently happens that the appointed local health officers know nothing or very little of the work they are called to do, and find themselves at sea when a sanitary problem appears. There would be little or no demand for State Board advice if the law required that local health officers should be informed in hygiene, and if the tenure of office and pay were such as to attract competent men. We recommend this change in the law as being eminently practical and businesslike.

EPIDEMICS.

No widespread epidemics have occurred, but there were a number of local epidemics, all of which are duly told about in the body of the report. Smallpox, which is a declaration of ignorance and neglect, because the people generally will not practically apply the scientific prophylaxis, has existed more or less in every month of the year. Fortunately, the deaths have been few, but the loss and anxiety has been great.

There is a decrease in diphtheria deaths, with the exception of the

last year, to be recorded for the last seven years, as appears herewith. Diphtheria deaths, 1900, 746; 1901, 554; 1902, 424; 1903, 462; 1904, 314; 1905, 366; 1906, 402.

The free antitoxin law, passed by the Sixty-fifth Assembly, has been duly put in force by the State Board supplying blanks as detailed in the law, and giving general instructions about the matter. It is believed this law will be a force in saving life from diphtheria.

Scarlet fever prevailed to a considerable degree, upon the opening of the schools in September, but it was almost always in mild form. Deaths from this cause have not increased.

STATE LABORATORY OF HYGIENE.

The State Laboratory of Hygiene's report shows a large amount of good work done. The chemical division has carried out the pure Food and Drug Law, which was passed by the Sixty-fifth Assembly, and which went into immediate force on March 4th. It has also made many sanitary water and sewage analyses, and through the five inspectors authorized, many sanitary inspections with corrections of unsanitary conditions, have been made.

The bacteriological division has done a large amount of bacteriological and pathological work, and many letters and much personal approval from the people are on record. The reports of the two departments herewith given show in detail the work done.

RECOMMENDATIONS.

In accordance with the law, which makes it the duty of the State Board of Health to make such recommendations concerning health laws as it may deem proper, we recommend as follows:

SANITARY SCHOOLHOUSES AND TEACHING HYGIENE IN THE PUBLIC SCHOOLS.

We suggest a statute requiring that all schoolhouses hereafter built shall conform to natural sanitary laws; also that the act should contain a clause requiring that hygiene be taught in the public schools. Not less than 10 per cent. of school moneys are now wasted on account of unsanitary schoolhouses, in which start most of our epidemics, and in which are laid the foundations in many for consumption and other diseases in after life. Massachusetts, Michigan and other states have statutes of the character we propose, and better health and progress among the school children has thus been

secured, as well as better health in adult life. There is a great opportunity to strengthen the nation by building sanitary school-houses and in instructing the children in hygiene.

POLLUTION OF STREAMS, WATER SUPPLIES AND SEWERS.

Indiana is an inland state, and is fortunately supplied with numerous streams and lakes, and except in the central and southern portion there is yet abundance of ground water. It is apparent that our streams and lakes are valuable assets, and should be jealously protected from pollution or other destruction. They are sources of beauty and refreshment to the land, sources of a valuable food supply, and must eventually furnish public water supplies. It is this last fact which makes it urgent that early action be taken for their preservation.

The experience of the Indianapolis and of the Muncie water companies demonstrates that the ground water is limited, is growing less and less, and is inadequate for the public supply. For a few years both of the cities named had an abundant pure supply, but gradually the quantity diminished and new wells were bored. This did not relieve the situation, for the new wells penetrated the same water bearing stratum as the old ones, and no increase in quantity was secured.

The Muncie Water Company relieved the situation for a time by making up the deficiency with filtered water from White river, but lately the oil wells above Muncie so badly polluted the river with kerosene products that it was impossible to filter the water. This drove the Muncie company to dam a small creek and establish a water shed. It is certain, however, if stream pollution is permitted to continue, that this supply for Muncie cannot be depended upon.

The Indianapolis Water Company has been compelled to put in extensive filter beds, costing five or six hundred thousand dollars, to filter the water from White river. This filtered water is at present mixed with deep well water (the amount of the latter diminishing daily), and this constitutes the Indianapolis supply. The lesson is—Indianapolis must very soon depend entirely upon the river, and if the gross pollution which now exists is permitted to continue, filtration will become more and more difficult and expensive, and Indianapolis, and also other cities on the shores of White river, will be sorely injured, possibly to a degree to stop their growth. What has occurred along White river will in time occur in all parts of the State, and now seems to be the time to apply the remedy. We pro-

pose a law similar to that of Massachusetts, where these same problems arose some years ago, and which the said law has satisfactorily solved. This law should make it unlawful to deposit sewage, factory wastes, or any polluted matter into streams or lakes, and it should provide that within a certain time that all cities and towns shall dispose of their sewage by well-proven methods known to sanitary science; and that all factories shall, within twelve months from the going into effect of the law, dispose of their wastes in a sanitary way. All of this has been repeatedly accomplished in other states.

As cities and towns are continually making expensive mistakes in the matter of establishing public water supplies and in building sewers and drains, it seems wise to adopt the successful method pursued in Ohio, Massachusetts, Pennsylvania, and other states, to prevent such mistakes, with their consequent money loss and sanitary failure. This method is to require by statutes that all plans and specifications for public water supplies, and for sewers and drains, shall be submitted for the approval of the State Board of Health before the same may be constructed.

For the State Board of Health to properly execute a law of this kind, controlling stream pollution, the water supplies and sewer construction, a sanitary engineering department would be required, and therefore, said law would necessarily create such department. There should be a competent sanitary engineer appointed by the State Board, and a proper appropriation given for the enforcement of the act.

We believe a wise law of this character is absolutely necessary for the promotion of the welfare of the State, and would be an economic measure, and for these reasons we propose the same. We further believe that the protection of the lakes and streams from pollution-destruction is a subject which will not down, and the question about the matter is, Shall the State attend to it now, or do so after disease, death and pecuniary loss compel action?

THE HEALTH LAW.

The Health Law of Indiana was passed in 1891. It does not recognize the advances made in sanitary science since its enactment. For this reason it should be amended. A provision which greatly cripples the law is in regard to health officers. It does not provide that health officers shall be men who are informed in hygiene. Very few doctors have studied hygiene, and, therefore, the usual officer

knows little or nothing of the science. In addition to this defect, officers are appointed for only one year and local authorities may pay such salaries as they deem proper. Not until only such persons are eligible to the place of health officer who have knowledge of the work, and not until the term of office is reasonably extended and the pay made commensurate with the services performed, will the people be properly served.

As the condition now exists, it is only rarely that good men seek the position. In many instances, persons unfitted for the work offer to fill the position for a small sum, and when accepted, they put the money in their pockets and do nothing. This way of doing is bad business, and it is not surprising that money is spent without return. Viewing the old health law of 1891 as a machine, it may be said that several old wheels and levers should be removed and new ones of new design substituted.

We recommend these improvements as wise and of the utmost importance to the profit and to the business of the State.

We most respectfully request that you give these recommendations as to improvement of health laws your careful consideration, and we hope they will secure your support and be recommended in your next message to the General Assembly.

Approved by the State Board of Health and ordered transmitted to the Governor.

FREDERICK A. TUCKER, President.

J. N. HURTY, Secretary.

Minutes of Transactions.

SPECIAL MEETING INDIANA STATE BOARD OF HEALTH.

November 16, 1906.

CALLED TO CONSIDER AND PASS UPON THE MANUSCRIPT OF THE ANNUAL REPORT, AND TO ATTEND TO ANY OTHER BUSINESS THAT MIGHT BE PRESENTED.

Called to order by President Davis at 2 p. m. Present: Drs. Davis, McCoy, Tucker, Hurty.

Mr. Dowling, Deputy Attorney-General, presented the fact that the Huntington County Court had decided, in conjunction with many other issues, that the State Board did not have power to condemn unsanitary schoolhouses.

Mr. Dowling recommended that the case be not appealed because of its many complications and that suit be brought for a mandate to enforce the order of condemnation made against the Polk township schoolhouse. He recommended that an order of the State Board be issued to the Huntington County Board of Health, commanding it to enforce the condemnation order, and supplied the following form:

ORDER FOR CLOSING SCHOOLHOUSE.

To the Board of Commissioners of Huntington County, Indiana:

The State Board of Health of the State of Indiana, in regular session assembled in the city of Indianapolis, Marion county, Indiana, this 16th day of November, 1906, having inquired into the sanitary condition of a certain schoolhouse located in Polk township, Huntington county, Indiana, and known as school No. —, and having, after careful inspection of the same, determined that said building is a nuisance, and dangerous to the health and lives of the pupils attending thereat, that it is wholly unfit for use for school purposes, and that its defects and unsanitary features can not be corrected or removed and said building can not be placed in such a condition or repair as will render it safe for the said pupils to attend school in the same.

Now, therefore, you, as constituting a Board of Health, ex officio, for said county of Huntington, are, according to law, hereby ordered and directed by the State Board of Health of Indiana to close said schoolhouse forthwith for all school purposes, and to forbid and prevent the further holding of school sessions, and the attendance and instruction of pupils, in said building.

You are directed to enforce the above requirements by all proper and legal means.

All of which is hereby ordered by the State Board of Health of Indiana, the year and day above written.

By, President.

Attest:, Secretary.

After full discussion, the recommendations of Mr. Dowling were adopted, and the Secretary was ordered to make out an order to the Huntington County Board of Health as recommended, and send it to the secretary of the Huntington County Board of Health, for him to duly serve upon the county commissioners.

THE T. A. SNYDER PRESERVE COMPANY, OF TIPTON, INDIANA.

The following communication and the following inspection of the plant of the T. A. Snyder Preserve Company at Tipton, were presented for consideration:

STATE OF INDIANA, TIPTON COUNTY, SS:

To the State Board of Health of the State of Indiana: The undersigned would respectfully show to your honorable board that it is a corporation duly organized under the laws of the State of Ohio, and is now, and has been for many years, engaged in manufacturing of tomato catsup. That one of the factories where it manufactures such catsup is located in Tipton, Ind., on the main line of the Lake Erie and Western Railroad. That the farmlands in the vicinity of Tipton are very fertile, and the soil is of such a nature that it produces large crops of very fine quality of tomatoes. That the undersigned has expended several thousand dollars in locating its said factory conveniently for the farmers who raise the tomatoes, and the employes who work in its said factory, and for shipping purposes, and at the time of the location of its said factory it obtained permission of the proper authorities of the city of Tipton to put in a five-inch sewer for its factory and connect it with one of the city sewers at a point about one hundred feet south of its said factory for the purpose of carrying off the waste water. That it put in said five-inch sewer in the summer of 1901, and connected the same with said city sewer, and has used the same ever since for the purpose of carrying off the waste water. That it obtains its supply of water from a driven well over one hundred feet in depth, and the same is pure and wholesome. This water is used in washing the tomatoes as they come from the fields, and in washing the vats in which the catsup is cooked and in washing the floors of the factory, after which it all flows through said five-inch sewer into a large city sewer which runs from a point near said factory south through said city, a distance of about three-quarters of a mile, and empties into a small stream known as Cicero Creek. That said stream is a natural water course and runs through the south part of said city of Tipton, and furnishes the only outlet for all the sewerage of said city, and empties into White river below Noblesville, Indiana. That the population of said city of Tipton is now about five thousand, and there is running water in said creek at all times of the year. The undersigned further says that there is no poisons of any kind or nature in the waste water when it flows from its factory, and that such waste water can be safely discharged into said sewer and stream without injury to the public health, and the undersigned prays that your honorable board grant and issue it a written permit to so discharge

its waste water into said stream, as it has no other way or means by which it can dispose of its waste water.

THE T. A. SNYDER PRES. CO.

STATE OF INDIANA, TIPTON COUNTY, SS:

Comes now, Isaac M. Taylor, who, being duly sworn, upon his oath says that he is now and has been for more than three years last past the local superintendent of the T. A. Snyder Preserve Company, at its factory at Tipton, Indiana, and that all the foregoing statements are true as he verily believes.

ISAAC M. TAYLOR.

Subscribed and sworn to before me this the 3d day of November, 1906.

CHARLES KEMP,
Not. Public.

My commission expires Sept. 24, 1910.

STATE OF INDIANA, TIPTON COUNTY, SS:

Comes now, Isaac M. Taylor, and being duly sworn, upon his oath says that he is now, and has been continuously for more than three years last past, the local superintendent for the T. A. Snyder Preserve Co., at its factory at Tipton, Indiana. That there has been practically no change in the manner of disposing of the waste water from said factory for more than a year last past. That said waste water passes through three screens into a settling vat or pit and then through a five-inch tile outlet about three feet above the bottom of said pit into a large city sewer and through it into Cicero Creek. That said five-inch tile is covered with a screen in said pit, the holes or meshes in said screen being about large enough to let a pea pass therethrough. The said factory is kept and run as carefully and cleanly as the same can be done, and great care is taken to prevent as little vegetable matter from passing into said city sewer as possible.

ISAAC M. TAYLOR.

Subscribed and sworn to before me this 3d day of November, 1906.

CHAS. KEMP,
Not. Public.

My commission expires Sept. 24, 1910.

REPORT OF INSPECTION OF THE T. A. SNYDER PRESERVE COMPANY'S FACTORY, TIPTON, IND.

Gentlemen—In response to a request from the T. A. Snyder Preserve Co., asking for a renewal of their permit to empty the waste water from their factory at Tipton, Ind., into Cicero Creek, I was instructed by Dr. Hurty to make an inspection of their factory and note any changes that may have been made in the past year.

On November 13 I visited Tipton, and in company with Drs. A. W. Gifford and J. T. Tresidder, the county and city health officers, made a thorough inspection of their factory.

The buildings are situated about one-half mile east of the L. E. & W. railway crossing on the north side of the tracks, in the northeast part of

the city, and consist of a two-story brick building, 65x175 feet, and a one-story brick boiler room, 16x30, at the northeast corner. The latter has cement floors. North of the boiler room is a coal shed covered with corrugated iron. The company owns twelve acres of ground abutting on the railway right of way and have the use of 200 acres adjoining upon which to dump their waste and refuse.

The nearest residence to the factory was about 200 yards southwest, on the south side of the railroad tracks, and the second nearest is a farm house about one-fourth mile northeast of the factory.

The work at the factory consists in making catsup exclusively, which is bottled and barreled, and their daily capacity is 125 gross of bottles and 150 barrels of the finished product.

At the time of our inspection, the fruit season was ended and they were working up the second grade products made from the pumice. Everything was in first-class condition and as clean as it was possible to keep it. The washing, cooking and shredding is done in the east end of the building and all tanks are connected with a cement trough which empties through a tile sewer into a catch basin near the southeast corner of the building. The bottom of this catch basin is about three feet lower than the outlet and any seeds or large pieces of vegetable that manage to pass through the wooden screens at the end of the trough, have a chance to settle at the bottom of the basin, which is cleared out two or three times a week during the busy season. There is also a wire screen over the outlet of this basin which prevents anything but liquids from flowing into the city sanitary sewer, with which it is connected by a tile carried under the L. E. & W. railway tracks, about 200 feet south of the tracks, and the waste water is carried by that sewer about one mile south to its outlet into Cicero Creek.

There is another catch basin near the southwest corner of the factory which receives all the waste water from the boiler rooms, bottling rooms and heating tanks where the filled bottles are boiled, which is also connected with the sanitary sewer. There was no odor from the heaps of refuse on the dumping ground north of the building, although the ground was well covered with the waste from the vegetables.

An inspection of the outlet of the sewer at Cicero Creek failed to reveal any odor of vegetable matter or trace of factory refuse. The manager in charge showed us over the factory and explained the details of their work very fully and seemed desirous that we should see everything connected with its sanitary arrangements.

Cicero Creek is the outlet for all the city storm water and sewage, and is a small, shallow stream flowing from southeast to northwest across the south and west part of the city, and at the time of my visit was so low that there was very little current perceptible. In my opinion, it is a benefit to the city to allow the waste water from the Snyder factory to empty into the sanitary sewer, thus assisting in diluting and flushing the sewer.

I recommend the granting of the permit as asked for.

Respectfully submitted,

JAMES L. ANDERSON,

Deputy State Sanitary Inspector.

After discussion, the following resolution and order was passed:

PERMIT TO DISCHARGE WASTE WATER INTO CICERO CREEK.

Whereas, The T. A. Snyder Preserve Company, a corporation owning a plant in Tipton, Indiana, has presented a verified application in writing asking permission to discharge waste matter from their factory into a five-inch sewer which empties into the city sewer, and which city sewer empties into Cicero Creek, and

Whereas, The State Board of Health has made an inspection at and below the point of discharge into Cicero Creek, and finds that the said waste may be safely discharged into said stream without injury to the public, therefore, it is

Ordered, That the T. A. Snyder Preserve Company is permitted to discharge its waste matters, consisting of washings from the factory, into Cicero Creek, through the sewer before named until January 1st, 1908.

Attest:

....., President.
....., Secretary.

Unanimously passed, November 16th, 1906.

Bookcase—The secretary reported lack of bookcase space and asked permission to have additional cases constructed to occupy the wall space in the northwest corner of room No. 24. The situation was inspected and discussed, and it was ordered that the secretary should have the needed cases built.

The secretary reported that according to the authority given him, he had appointed Dr. J. B. Rucker, assistant in the hygiene laboratory of the University of Pennsylvania, to the position of bacteriologist and pathologist in the State Laboratory of Hygiene at an annual salary of \$1,500, Dr. Rucker to take the position December 1st, 1906.

Appointment was unanimously confirmed.

The manuscripts for the reports to the Governor of the work of the Board, the fiscal accounts, and the records of the work of both divisions of the State Laboratory of Hygiene were submitted.

The said manuscripts were read and discussed, and with a few minor changes were adopted, duly signed by all members of the Board, and ordered presented to the Governor.

First Regular Meeting.

REGULAR QUARTERLY MEETING OF THE STATE BOARD OF HEALTH.

January 11, 1907.

AFFAIRS CONSIDERED OF THE FIRST FISCAL QUARTER OF 1906-7
AND THE LAST CALENDAR QUARTER OF 1906.

Called to order by President Davis at 2 p. m. Present: Drs. Davis, McCoy, Wishard, Tucker, Hurty.

Minutes of the last regular meeting held October 12, 1906, and the special meeting held November 16, 1906, read and approved.

President called for the report of the Secretary for the calendar quarter, ending December 31, 1906.

REPORT OF SECRETARY FOR THE CALENDAR QUARTER, ENDING DECEMBER 31, 1906.

I have the honor to report that the affairs of the office proceeded satisfactorily during the calendar quarter ending December 31st.

The Secretary made seven visits, as follows:

November 1st.—Tipton, account of invitation of city government to consult in regard to sanitary matters and to deliver an address in the evening on the "Prevention and Cure of Tuberculosis."

November 2d.—Madison, account of smallpox, being invited by the city authorities.

November 20th.—Mexico City, to attend the annual meeting of the American Public Health Association, as per permission of the Board.

December 19th.—Shelbyville, account of invitation of the local Board of Health to visit slaughter houses and meat shops, and to deliver a lecture in the afternoon upon the public health before the Shelby County Farmers' Institute, and in the evening to give a popular lecture upon "The Prevention and Cure of Tuberculosis."

December 31st.—Martinsville, account of invitation of local health officer to help forward the cause of school sanitation and to confer with the mayor and city council upon such subjects.

Full reports of the above visits are herewith given:

Tipton—November 1st I visited Tipton and spent the afternoon in inspecting the sanitary conditions of the city, and later conferred with the mayor and committee of health of the council. Much complaint had been made against a ketchup factory belonging to the Snyder Preserve Co. The washwater and drainings which flow into a city sewer are finally emptied into a small creek. Farmers living on the creek had made complaint that the refuse from the ketchup factory ruined the waters of the creek, making them unfit for cattle to drink and otherwise doing their lands injury. This matter has once been tried in the courts and the first suit was settled by acquitting the defendant. The management of the factory asserts that nothing but scrubblings and floor washings find their way into the sewer, the closets not even being connected with said sewer, but pits in the ground being used. Inspection at the mouth of the sewer showed that the sewage of the city was discharged into a small creek and really constituted a nuisance, ruining the waters of the creek, but there is no relief from any pollution caused by a city.

The high school building was inspected, found to be old and in every way unsanitary. In every room the children were surrounded by unsanitary conditions. Not one room in the building is properly lighted or properly ventilated. All of the facts pertaining to this building were presented to the authorities and it was found that the public was decidedly in favor of erecting a new building, but had been prevented by injunctions and the opposition of a few.

In the evening I delivered a lecture in a church to an audience which overflowed the room. It was entirely popular and given under the auspices of the local Medical Society. I took occasion to deliver a plea in regard to their school houses and told them that their children had for years lived under adverse conditions and that said adverse conditions were getting worse. It is very probable that Tipton will have a new school building within another year. A kind resolution of thanks was passed by the audience for the lecture, and said resolution expressed confidence in and encouragement for the work of the State Board of Health.

Madison—On November 2d I visited Madison on account of small-pox. The disease had again taken hold of that city and I found twenty-three cases in the schoolhouses and four cases under quarantine in houses in the city. Only five of these cases were at all severe; others varied from very mild indeed to moderately severe. As is usual in these epidemics, certain physicians had denied that smallpox existed, and it was this fact that led to the complications.

With a few of the physicians pulling one way and a few another, the local authorities did not know what to do. After visiting the pest houses and examining all the patients there, and also visiting and examining all of the patients in houses under quarantine, I met with the public health committee of the council. The conclusions of the conference were that the conference would meet and commence a vigorous campaign against the disease. They promised to purchase fresh vaccine and offer free vaccination and to rigidly enforce quarantine measures. I took occasion to visit the new school building which is being erected and which is the result of condemnation by this Board of three old dilapidated structures. The new building will be completed by the last of January and the plan showed that every required sanitary feature will be incorporated.

Mexico City—The thirty-fourth annual meeting of the A. P. H. A. was held in the City of Mexico, December 3d, 4th, 5th, 6th and 7th. One hundred and sixty-eight members were present from the United States and a slightly larger number from the Republic of Mexico. The first meeting was promptly called to order at 10 a. m. December 3d, and the scientific section took charge. In this section, everything pertaining to bacteriology, pathology, and everything that is extremely technical, is considered. It is not necessary to give the program here. One of the remarkable papers was delivered by Dr. Kohnke, late health officer of New Orleans. His subject was: "The Yellow Fever Epidemic in New Orleans in 1905."

In this paper Dr. Kohnke reviewed the causes leading up to the yellow fever epidemic in his city and presented lantern views of many situations and told of the many difficulties to be overcome in fighting the disease. Mosquito life was illustrated in all its stages from the actual eggs of the insect through larva, pupa, and finally the developed insect. The most interesting picture was that of the larva, showing how they were killed by oiling the surfaces of the water. The larva were shown in a cell placed in the lantern. At first, they were very active, but after the operator had placed a few drops of kerosene oil upon the surface of the water in a tank, the larva were quickly smothered to death. Dr. Kohnke stated that his picture and demonstrations of the life of the mosquito had been shown in numerous places in New Orleans in the campaign of education which was carried on against yellow fever.

The Mexicans led in the number of papers presented, covering many phases of sanitation. However, as the program shows, not a few papers were read by Canadian and American members. The

social features of the meeting were very delightful. Opportunity was given us to visit the new water works and sewage disposal plants in the city. We also visited the great National Hospital, which has just been completed at the expense of three million dollars, and which is a model in every respect. Not a single sanitary feature has been left out of this hospital. The drainage, ventilation and dietary are perfect. There are baths and a gymnasium, with every appliance which has been invented to aid in the recovery and preservation of health.

The Association visited Vera Cruz and there inspected the new and model quarantine station. Vera Cruz was the former home of yellow fever, but only two cases originated there during the last summer, so rigid and effective has been the fight against the malady. Other cities no longer quarantine against Vera Cruz. It seems unnecessary here to describe the sanitary defenses of this city, for it would take considerable space and they are fully described and illustrated in sanitary magazines. President Diaz graciously received the Association and made a speech of encouragement, saying that this work was one of the noblest that men could engage in.

Shelbyville—December 19th I visited Shelbyville and with the health officer, Dr. Keeney, visited two slaughter-houses and several butcher shops. We inspected the sanitary features of the same. A full report of these inspections was written out by Dr. Keeney and I accompanied him when they were presented to the authorities of the city. Several recommendations were made which the authorities immediately adopted and said they would enforce them. In the afternoon I delivered a lecture upon "School Hygiene" before the Shelby County Farmers' Institute and distributed two hundred of our "Envelope Packages" containing circulars upon the prevention of various diseases. The Institute passed a vote of thanks and confidence in and encouragement for the work of the State Board of Health. In the evening I delivered a lecture upon "The Prevention and Cure of Tuberculosis," before a popular audience, and same was illustrated by a projecting lantern. The audience filled the court-room and many were turned away. It is believed that much good was accomplished by this public lecture. The usual resolutions and thanks were passed.

Martinsville—I visited Martinsville, December 31st, and with Dr. Tilford, secretary of the local Board of Health, visited two school buildings; also made inspection of White river in regard to pollution from Indianapolis. We also inspected several alleys, and with

the city engineer examined and studied the sewer plans of the city. Recommendations were made in connection with every point visited, and same were kindly received, with promises to make changes at the earliest date possible.

The public health for the quarter was not quite as good as in the corresponding period last year. We have to record an increase in smallpox over said period, and also an increase in typhoid fever. The tables here given show the exact status of the report.

SMALLPOX COMPARISON FOR FOURTH CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
October, 1905.....	0	0	0
October, 1906.....	118	3	9
November, 1905.....	112	1	13
November, 1906.....	216	0	14
December, 1905.....	112	1	13
December, 1906.....	393	1	19
Total, 1905.....	224	3	26
Total, 1906.....	727	4	42

TYPHOID FEVER COMPARISON FOR FOURTH CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
October, 1905.....	711	152	72
October, 1906.....	732	150	73
November, 1905.....	575	101	62
November, 1906.....	790	135	73
December, 1905.....	306	66	47
December, 1906.....	337	79	50
Total, 1905.....	1,592	319	181
Total, 1906.....	1,859	364	196

There were diphtheria epidemics in sixteen counties and scarlet fever epidemics in twelve. With both these diseases, the cases were mostly mild, yet the deaths were in excess of the corresponding month last year. Consumption still goes on its horrid way, slaying as usual. There is not the slightest abatement in it, as appears by the comparisons.

Dr. J. B. Rucker, Jr., promptly took charge of the bacteriological laboratory December 1st, succeeding Dr. Keene, who resigned. The work of that department has gone forward as if no change had been made, and is satisfactory in every way. The report of the first month under Dr. Rucker is herewith attached:

REPORT FROM THE DIVISION OF BACTERIOLOGY AND PATHOLOGY OF THE INDIANA STATE LABORATORY OF HYGIENE.

To the Board of Health of the State of Indiana:

Sirs—I have the honor to make my report for the month ending December 31, 1906, as follows:

Upon assuming charge as chief of the division of bacteriology and pathology, I found a laboratory well equipped, and having the appearance of order and cleanliness which is essential to good work in all laboratories of bacteriology and pathology.

In reviewing the reports of the examinations made during the month just past, I find that 178 physicians from sixty counties in the state made use of the laboratory during December. We hope to be able in our next report to show an increase over this in the number of physicians making use of our facilities for scientific examinations.

The list of diseases, suspected specimens of which were submitted for examination, included diphtheria, tuberculosis, typhoid fever, cerebrospinal meningitis, hydrophobia, gonorrhoea, malaria, carcinoma, sarcoma and adeno-sarcoma. One bacteriologic examination of drinking water was made and two specimens of urine were examined for the presence of *B. tuberculosis*.

The following is a detailed account of examinations of specimens submitted, showing positive or negative findings and those of a doubtful or unsatisfactory character, arranged according to the counties from which the specimens were sent:

TYPHOID FEVER.

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>
Blackford	2	0	0
Bartholomew	0	1	0
Hendricks	0	1	1
Henry	1	0	0
Johnson	1	0	0
Kosciusko	1	0	0
Laporte	2	1	0
Marion	6	3	0
Posey	1	0	0
Randolph	1	1	0
Spencer	1	1	0
Wayne	0	2	0
White	1	0	0
	—	—	—
	17	10	1
Total			28

DIPHTHERIA.

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>
Allen	1	1	0
Bartholomew	1	1	0
Carroll	0	1	0

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>
Clark	1	0	0
Delaware	2	4	1
Floyd	1	0	0
Grant	0	1	0
Henry	0	1	0
Howard	0	1	0
Huntington	1	0	0
Jennings	0	1	0
Madison	4	4	0
Marion	5	5	0
Monroe	0	1	0
Montgomery	0	1	0
Randolph	3	3	0
Rush	2	0	1
Tippecanoe	0	1	0
Tipton	2	1	0
Union	1	1	0
Wabash	2	0	0
Wayne	2	1	0
Wells	1	0	0
White	1	2	0
Whitley	0	2	0
<hr/>			
	30	33	2
Total			65

TUBERCULOSIS.

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>
Adams	0	1
Allen	0	1
Bartholomew	1	4
Benton	0	2
Blackford	1	4
Boone	1	0
Carroll	0	2
Clinton	0	1
Crawford	2	1
Daviess	1	0
Delaware	3	2
Elkhart	2	1
Floyd	0	1
Fountain	0	2
Gibson	1	0
Hamilton	2	3
Hendricks	1	3
Henry	2	1
Howard	0	1
Jackson	2	2
Jasper	1	1

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>
Jay	3	0
Jefferson	0	1
Knox	1	1
Kosciusko	1	0
Lagrange	0	2
Lake	0	1
Laporte	1	1
Madison	3	0
Marion	6	15
Marshall	1	0
Martin	0	1
Miami	0	2
Montgomery	0	1
Morgan	1	0
Newton	0	1
Parke	0	1
Posey	1	2
Pulaski	0	3
Putnam	0	1
Randolph	0	1
Ripley	0	1
Starke	0	1
Sullivan	1	1
Tippecanoe	0	2
Tipton	0	2
Union	0	3
Vigo	1	0
Wabash	0	1
Warren	1	0
Wayne	1	4
Wells	0	2
White	0	2
Whitley	1	3
	—	—
	43	89
Total		132

Of specimens of a miscellaneous character we reported:

Sarcoma of the testicle	1	
Sarcoma of the external ear	1	
Sarcoma of the alveolus	1	
Sarcoma of the axillary glands	1	
Carcinoma of the stomach.....	1	
Carcinoma of the breast.....	2	
Adeno-carcinoma of the nose.....	1	
Cerebro-spinal meningitis	Positive 2	
Hydrophobia	Positive 2	Negative 1
Gonorrhoea	Positive 1	Negative 1
Malaria		Negative 1

B. tuberculosis in urine	Negative	2
Examination of water	1	
Bact. examination of membrane from throat	1	
	15	5
Total		20

The whole number of examinations made during the month of December was 245.

Respectfully,

J. B. RUCKER, M. D.,
Superintendent.

It is impossible in this report to present a summary of the work of the Board for 1906, because such report would not be complete without the consideration of the statistics, and these cannot be tabulated and analyzed within ninety days. Before the next regular meeting a summary for the year will be presented.

As ordered by the Board, the new Health Law and the new Pure Food and Drug Law, as submitted and passed upon by the Board, were resubmitted to the Attorney-General, and at this meeting I present the remodeled and rewritten bills.

After a little discussion, the secretary's report, as read, was ordered to be placed of record.

NEW HEALTH LAW.

The secretary reported that Mr. Dowling, Deputy Attorney-General, had, after study, recommended that the new legislation written by the Board be written as an amendment to the Health Law of 1891. His reasons were that the old law contained no less than five acceptable sections; also it had been amended in 1899, and the amendment declaimed unconstitutional because of the omission, by an engrossing clerk, of one line out of the title of the act amended; also because it would probably be easier to secure an amendment than to secure an entire new law.

The bill was carefully studied by sections and only a few minor changes made, and the secretary was directed to have it introduced into the lower house of the Legislature.

BILL FOR A TUBERCULOSIS HOSPITAL.

Hon. Richard Elliott and Dr. Theo. Potter of the State Tuberculosis Commission, sent a copy of a bill establishing a State Tuberculosis Hospital, for the consideration of the Board. The said bill was carefully reviewed and a few changes suggested. The prin-

cial suggestion was that the official name of the institution be The Indiana State Health Farm. It was also suggested, in connection therewith, that provision be made for local tuberculosis dispensaries.

THE PURE FOOD BILL.

The new Pure Food and Drug Bill, as last revised and written by Deputy Attorney-General Dowling, was read and considered, section by section, and approved.

Work for the coming quarter was discussed, but no orders were given, as a new health law was hoped for from the present Legislature.

SPECIAL MEETING INDIANA STATE BOARD HEALTH.

March 15, 1907.

Called to order by President Davis at 2 p. m. Present: Davis, Tucker, McCoy, Hurty, Wishard.

President Davis announced the object of the meeting was to consider new rules, establishing food and drug standards and declaring specific adulterations, under the new food law. Also to appoint food and drug inspectors, to appoint a drug chemist, to fix salaries and to make rules governing the various departments and to take up such other work as might be presented.

Moved by Tucker and seconded by McCoy, that the various divisions of the State Board of Health shall be:

(1) DEPARTMENT OF ADMINISTRATION, of which the secretary of the Board shall be the head, and through said department all orders of the Board shall issue, and said secretary shall be the chief executive officer of the Board and director of all departments, subject to the supervision of the Board.

(2) DEPARTMENT OF STATISTICS—The chief clerk of vital statistics shall be the head of this department.

(3) BACTERIOLOGICAL AND PATHOLOGICAL LABORATORY, of which the superintendent of the same shall be the head.

(4) FOOD, DRUG AND WATER LABORATORY, of which the chemist of the Board, who is also, under the law, state food and drug commissioner, shall be the head.

(5) The two laboratories named in sections (3) and (4) shall constitute the State Laboratory of Hygiene.

Adopted separately and as a whole.

The Board then took up the consideration of the pure food and drug laws, and after consideration, each rule was adopted singly, and finally they were adopted as a whole. The adoption, as a whole, was unanimous.

FOOD AND DRUG RULES.

RULES OF THE INDIANA STATE BOARD OF HEALTH, ACCORDING TO CHAPTER 104,
ACTS OF 1907, ESTABLISHING MINIMUM STANDARDS AND DEFINING
SPECIFIC ADULTERATION OF FOODS AND DRUGS.

(Passed March 15, 1907, by the Indiana State Board of Health.)

The Pure Food and Drug Law, approved March 4, 1907, makes it the duty of the State Board of Health to enforce "the laws of the state governing food and drug adulteration" and makes "the chemist of the State Board of Health appointed by said board,.....the state food and drug commissioner." The authority of the state board for making rules is found in Section 7 of the Pure Food and Drug Law as follows: "The State Board of Health shall adopt such rules as may be necessary to enforce this act, and shall adopt rules regulating minimum standards for food and drugs, defining specific adulteration and declaring the proper methods of collecting and examining drugs and articles of food." The same section provides that: "The violation of said rules shall be punished, on conviction, as set forth in Section 10 of this act."

In accordance with the authority above cited, the State Board of Health on March 15, 1907, adopted the following rules for the enforcement of the Pure Food and Drug Act and regulating minimum standards for food and drugs.

These rulings furnish a definite basis for work in the enforcement of the "Pure Food and Drug Law," and are intended to anticipate any question as to the attitude of the State Board of Health in regard to the application of the law to particular articles of food and will be followed in the enforcement of the law.

The definitions and standards adopted are generally those established as official for the United States by the Secretary of Agriculture by authority of an act of Congress approved June 3, 1902; or the standards as given in the latest edition of the United States Pharmacopoeia or National Formulary, or after thorough investigation and trial adopted by many of the states.

EXPLANATORY DEFINITIONS.

1. The manufacturing for sale, offering for sale or having in one's possession to sell, within the State of Indiana, of any adulterated or misbranded drug or article of food, is unlawful.

2. The term "food" as used herein, includes all articles used for food, drink, confectionery or condiment by man or other animals, whether simple, mixed or compounded.

3. The term "drug" as used herein, includes all medicines and preparations recognized in the United States Pharmacopoeia or National Formulary, for internal or external use, and any substance or mixture of substances intended to be used for the cure, mitigation or prevention of disease of either man or other animal.

4. An article shall be deemed to be adulterated within the meaning of Section 2 of the General Food Law :

A—IN THE CASE OF DRUGS.

1. If when sold under or by a name recognized in the United States Pharmacopoeia or National Formulary it differs from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopoeia or National Formulary official at the time of investigation: Provided, That no drug as above defined shall be deemed to be adulterated if the standard of strength, quality or purity be plainly stated upon the box, bottle or other container thereof, although the standard may be different from that given in the United States Pharmacopoeia or National Formulary.

2. If its strength or purity fall below the professed standard or quality under which it is sold.

B—IN CASE OF FOOD.

First. If any substance or substances have been mixed with it so as to reduce, or lower, or injuriously affect its quality or strength;

Second. If any substance has been substituted wholly or in part for the article;

Third. If any valuable constituent has been wholly or in part abstracted from it;

Fourth. If it consists in any proportion of a filthy, diseased, decomposed, putrid or rotten animal or vegetable substance, whether manufactured or not, or in the case of milk, if it is the product of a diseased animal;

Fifth. If it is mixed, colored, coated, polished, powdered or strained in a manner whereby damage or inferiority is concealed, or whereby it is made to appear better or of greater value than it really is;

Sixth. If it contains any added poisonous or other added deleterious ingredient;

Seventh. If it contains any added antiseptic or preservative substance except common table salt, saltpeter, cane sugar, vinegar, spices or in smoked food, the natural products of the smoking process, or other harmless preservatives whose use is authorized by the State Board of Health.

RULES REGULATING MINIMUM STANDARDS FOR FOOD AND DRUGS, AND DEFINING SPECIFIC ADULTERATION.

I. ANIMAL PRODUCTS.

A. MEATS AND THE PRINCIPAL MEAT PRODUCTS.

a. Meats.

1. MEAT, FLESH, is any clean, sound, dressed, and properly prepared edible part of animals in good health at the time of slaughter, and if it bears a name descriptive of its kind, composition, or origin, it corresponds thereto. The term "animal," as herein used, includes not only mammals, but fish, fowl, crustaceans, mollusks, and all other animals used as food.

2. FRESH MEAT is meat from animals recently slaughtered and properly cooled until delivered to the consumer.

3. COLD STORAGE MEAT is meat from animals recently slaughtered and preserved by refrigeration until delivered to the consumer.

4. SALTED, PICKLED and SMOKED MEATS are unmixed meats preserved by salt, sugar, vinegar, spices, or smoke, singly or in combination, whether in bulk or in suitable containers.*

b. Manufactured Meats.

1. MANUFACTURED MEATS are meats not included in paragraphs 2, 3, and 4, whether simple or mixed, whole or comminuted, in bulk or in suitable containers, with or without the addition of salt, sugar, vinegar, spices, smoke, oils, or rendered fat. If they bear names descriptive of kind, composition, or origin, they correspond thereto and when bearing such descriptive names, if force or flavoring meats are used, the kind and quantity thereof are made known.

c. Lard.

1. LARD is the rendered fresh fat from hogs in good health at the time of slaughter, is clean, free from rancidity, and contains, necessarily incorporated in the process of rendering, not more than one (1) per cent. of substances, other than fatty acids and fat.

2. LEAF LARD is lard rendered at moderately high temperature from the internal fat of the abdomen of the hog, excluding that adherent to the intestines, and has an iodine number not greater than sixty (60).

3. NEUTRAL LARD is lard rendered at low temperatures.

*Suitable containers for keeping moist food products, such as sirups, honey, condensed milk, soups, meat extracts, meats, manufactured meats, and undried fruits and vegetables, and wrappers in contact with food products, contain on their surfaces, in contact with the food product, no lead, antimony, arsenic, zinc or copper or any compounds thereof or any other poisonous or injurious substance. If the containers are made of tin plate they are outside-soldered and the plate in no place contains less than one hundred and thirteen (113) milligrams of tin on a piece five (5) centimeters square or one and eight-tenths (1.8) grains on a piece two (2) inches square.

The inner coating of the containers is free from pin holes, blisters, and cracks. If the tin plate is lacquered, the lacquer completely covers the tinned surface within the container and yields to the contents of the container no lead, antimony, arsenic, zinc or copper or any compounds thereof, or any other poisonous or injurious substance.

B. MILK AND ITS PRODUCTS.

a. Milks.

1. MILK is the fresh, clean, lacteal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept, excluding that obtained within fifteen days before and ten days after calving, and contains not less than eight and one-half (8.5) per cent. of solids not fat, and not less than three and one-quarter (3.25) per cent. of milk fat.

2. BLENDED MILK is milk modified in its composition so as to have a definite and stated percentage of one or more of its constituents.

3. SKIM MILK is milk from which a part or all of the cream has been removed and contains not less than nine and one-quarter (9.25) per cent. of milk solids.

4. PASTEURIZED MILK is milk that has been heated below boiling but sufficiently to kill most of the active organisms present and immediately cooled to 50° Fahr. or lower.

5. STERILIZED MILK is milk that has been heated at the temperature of boiling water or higher for a length of time sufficient to kill all organisms present.

6. CONDENSED MILK, EVAPORATED MILK, is milk from which a considerable portion of water has been evaporated and contains not less than twenty-eight (28) per cent. of milk solids of which not less than twenty-seven and five-tenths (27.5) per cent. is milk fat.

7. SWEETENED CONDENSED MILK is milk from which a considerable portion of water has been evaporated and to which sugar (sucrose) has been added, and contains not less than twenty-eight (28) per cent. of milk solids, of which not less than twenty-seven and five-tenths (27.5) per cent. is milk fat.

8. CONDENSED SKIM MILK is skim milk from which a considerable portion of water has been evaporated.

9. BUTTERMILK is the product that remains when butter is removed from milk or cream in the process of churning.

10. GOAT'S MILK, EWE'S MILK, ETCETERA, are the fresh, clean, lacteal secretions, free from colostrum, obtained by the complete milking of healthy animals other than cows, properly fed and kept, and conform in name to the species of animal from which they are obtained.

b. Cream.

1. CREAM is that portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force, is fresh and clean and contains not less than eighteen (18) per cent. of milk fat.

2. EVAPORATED CREAM, CLOTTED CREAM, is cream from which a considerable portion of water has been evaporated.

c. Milk Fat or Butter Fat.

1. MILK FAT, BUTTER FAT, is the fat of milk and has a Reichert-Meissl number not less than twenty-four (24) and a specific gravity not less than 0.905 $\left(\begin{smallmatrix} 40^{\circ} \text{C.} \\ 40^{\circ} \text{C.} \end{smallmatrix} \right)$

d. Butter.

1. BUTTER is the clean, non-rancid product made by gathering in any manner the fat of fresh or ripened milk or cream into a mass, which also contains a small portion of the other milk constituents, with or without salt, and contains not less than eighty-two and five-tenths (82.5) per cent. of milk fat. By acts of Congress approved August 2, 1886, and May 9, 1902, butter may also contain added coloring matter.

2. RENOVATED BUTTER, PROCESS BUTTER, is the product made by melting butter and reworking, without the addition or use of chemicals or any substances except milk, cream, or salt, and contains not more than sixteen (16) per cent. of water and at least eighty-two and five-tenths (82.5) per cent. of milk fat.

e. Cheese.

1. CHEESE is the sound, solid, and ripened product made from milk or cream by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning, and contains, in the water-free substance, not less than fifty (50) per cent. of milk fat. By act of Congress, approved June 6, 1896, cheese may also contain added coloring matter.

2. SKIM MILK CHEESE is the sound, solid, and ripened product, made from skim milk by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning.

3. GOAT'S MILK CHEESE, EWE'S MILK CHEESE, ETCETERA, are the sound, ripened products made from the milks of animals specified, by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning.

f. Ice Cream.

ICE CREAM is a frozen product containing not less than 8 per cent. of butter fat and 18 per cent. of milk solids, with the addition of sugar (sucrose) and with or without natural flavoring and not to exceed seven-tenths of one per cent. of gelatine.

FRUITS, NUTS, candied and preserved fruits and nuts, chocolate and other similar products shall be classed as flavorings and ice cream containing such ingredients shall conform to the standard above specified.

g. Miscellaneous Milk Products.

1. WHEY is the product remaining after the removal of fat and casein from milk in the process of cheese-making.

2. KUMISS is the product made by the alcoholic fermentation of mare's or cow's milk.

II. VEGETABLE PRODUCTS.

A. GRAIN PRODUCTS.

a. Grains and Meals.

1. GRAIN is the fully matured, clean, sound, air-dry seed of wheat, maize, rice, oats, rye, buckwheat, barley, sorghum, millet, or spelt.

2. MEAL is the clean, sound product made by grinding grain.

3. FLOUR is the fine, clean, sound product made by bolting wheat meal and contains not more than thirteen and one-half (13.5) per cent. of moisture, not less than one and twenty-five hundredths (1.25) per cent. of nitrogen, not more than one (1) per cent. of ash, and not more than fifty hundredths (0.50) per cent. of fiber.

4. GRAHAM FLOUR is unbolted wheat meal.

5. GLUTEN FLOUR is the clean, sound product made from flour by the removal of starch and contains not less than five and six-tenths (5.6) per cent. of nitrogen and not more than ten (10) per cent. of moisture.

6. MAIZE MEAL, CORN MEAL, INDIAN CORN MEAL, is meal made from sound maize grain and contains not more than fourteen (14) per cent. of moisture, not less than one and twelve hundredths (1.12) per cent. of nitrogen, and not more than one and six-tenths (1.6) per cent. of ash.

7. RICE is the hulled, or hulled and polished grain of *Oryza sativa*.

8. OATMEAL is meal made from hulled oats and contains not more than twelve (12) per cent. of moisture, not more than one and five-tenths (1.5) per cent. of crude fiber, not less than two and twenty-four hundredths (2.24) per cent. of nitrogen, and not more than two and two-tenths (2.2) per cent. of ash.

9. RYE FLOUR is the fine, clean, sound product made by bolting rye meal and contains not more than thirteen and one-half (13.5) per cent. of moisture, not less than one and thirty-six hundredths (1.36) per cent. of nitrogen, and not more than one and twenty-five hundredths (1.25) per cent. of ash.

10. BUCKWHEAT FLOUR is bolted buckwheat meal and contains not more than twelve (12) per cent. of moisture, not less than one and twenty-eight hundredths (1.28) per cent. of nitrogen, and not more than one and seventy-five hundredths (1.75) per cent. of ash.

B. FRUIT AND VEGETABLES.

a. Fruit and Fruit Products. (Except fruit juices, fresh, sweet, and fermented, and vinegars).

1. FRUITS are the clean, sound, edible, fleshy fructifications of plants, distinguished by their sweet, acid, and ethereal flavors.

2. DRIED FRUIT is the clean, sound product made by drying mature, properly prepared, fresh fruit in such a way as to take up no harmful substance, and conforms in name to the fruit used in its preparation; sun-dried fruit is dried fruit made by drying without the use of artificial means; evaporated fruit is dried fruit made by drying with the use of artificial means.

3. EVAPORATED APPLES are evaporated fruit made from peeled and cored apples, and contain not more than twenty-seven (27) per cent. of moisture determined by the usual commercial method of drying for four (4) hours at the temperature of boiling water.

4. CANNED FRUIT is the sound product made by sterilizing clean, sound, properly matured and prepared fresh fruit, by heating, with or without sugar (sucrose) and spices, and keeping in suitable, clean, hermetically sealed containers and conforms in name to the fruit used in its preparation.

5. **PRESERVE** is the sound product made from clean, sound, properly matured and prepared fresh fruit and sugar (sucrose) sirup, with or without spices or vinegar, and conforms in name to that of the fruit used, and in its preparation not less than forty-five (45) pounds of fruit are used to each fifty-five (55) pounds of sugar.

6. **HONEY PRESERVE** is preserve in which honey is used in place of sugar (sucrose) sirup.

7. **GLUCOSE PRESERVE** is preserve in which a glucose product is used in place of sugar (sucrose) sirup.

8. **JAM, MARMALADE**, is the sound produce made from clean, sound, properly matured and prepared fresh fruit and sugar (sucrose), with or without spices or vinegar, by boiling to a pulpy or semisolid consistence, and conforms in name to the fruit used, and in its preparation not less than forty-five (45) pounds of fruit are used to each fifty-five (55) pounds of sugar.

9. **GLUCOSE JAM, GLUCOSE MARMALADE**, is jam in which a glucose product is used in place of sugar (sucrose).

10. **FRUIT BUTTER** is the sound product made from fruit juice and clean, sound, properly matured and prepared fruit, evaporated to a semisolid mass of homogeneous consistence, with or without the addition of sugar and spices or vinegar, and conforms in name to the fruit used in its preparation.

11. **GLUCOSE FRUIT BUTTER** is fruit butter in which a glucose product is used in place of sugar (sucrose).

12. **JELLY** is the sound, semisolid, gelatinous product made by boiling clean, sound, properly matured and prepared fresh fruit with water, concentrating the expressed and strained juice, to which sugar (sucrose) is added, and conforms in name to the fruit used in its preparation.

13. **GLUCOSE JELLY** is jelly in which a glucose product is used in place of sugar (sucrose).

b. Vegetables and Vegetable Products.

1. **VEGETABLES** are the succulent, clean, sound, edible parts of herbaceous plants used for culinary purposes.

2. **DRIED VEGETABLES** are the clean, sound products made by drying properly matured and prepared vegetables in such a way as to take up no harmful substance, and conform in name to the vegetables used in their preparation; sun-dried vegetables are dried vegetables made by drying without the use of artificial means; evaporated vegetables are dried vegetables made by drying with the use of artificial means.

3. **CANNED VEGETABLES** are sound, properly matured and prepared fresh vegetables, with or without salt, sterilized by heat, with or without previous cooking in vessels from which they take up no metallic substance, kept in suitable, clean, hermetically sealed containers, are sound and conform in name to the vegetables used in their preparation.

4. **PICKLES** are clean, sound, immature cucumbers, properly prepared, without taking up any metallic compound other than salt, and preserved in any kind of vinegar, with or without spices; pickled onions, pickled beets, pickled beans, and other pickled vegetables are vegetables prepared as described above and conform in name to the vegetables used.

5. SALT PICKLES are clean, sound, immature cucumbers, preserved in a solution of common salt, with or without spices.

6. SWEET PICKLES are pickled cucumbers or other vegetables in the preparation of which sugar (sucrose) is used.

7. SAUERKRAUT is clean, sound, properly prepared cabbage, mixed with salt, and subjected to fermentation.

8. CATCHUP (KETCHUP, CATSUP) is the clean, sound product made from the properly prepared pulp of clean, sound, fresh, ripe tomatoes, with spices and with or without sugar and vinegar; mushroom catchup, walnut catchup, etcetera, are catchups made as above described, and conform in name to the substances used in their preparation.

C. SUGARS AND RELATED SUBSTANCES.

a. Sugar and Sugar Products.

Sugars.

1. SUGAR is the product chemically known as sucrose (saccharose) chiefly obtained from sugar cane, sugar beets, sorghum, maple, and palm.

2. GRANULATED, LOAF, CUT MILLED, AND POWDERED SUGARS are different forms of sugar and contain at least ninety-nine and five-tenths (99.5) per cent. of sucrose.

3. MAPLE SUGAR is the solid product resulting from the evaporation of maple sap, and contains, in the water-free substance, not less than sixty-five one-hundredths (0.65) per cent. of maple sugar ash.

4. MASSECUITE, MELADA, MUSH SUGAR, AND CONCRETE are products made by evaporating the purified juice of a sugar-producing plant, or a solution of sugar, to a solid or semisolid consistence, and in which the sugar chiefly exists in a crystalline state.

Molasses and Refiners' Sirup.

1. MOLASSES is the product left after separating the sugar from massecuite, melada, mush sugar, or concrete, and contains not more than twenty-five (25) per cent. of water and not more than five (5) per cent. of ash.

2. REFINERS' SIRUP, TREACLE, is the residual liquid product obtained in the process of refining raw sugars and contains not more than twenty-five (25) per cent. of water and not more than eight (8) per cent. of ash.

Sirup.

1. SIRUP is the sound product made by purifying and evaporating the juice of a sugar-producing plant without removing any of the sugar.

2. SUGAR-CANE SIRUP is sirup made by the evaporation of the juice of the sugar cane or by the solution of sugar-cane concrete, and contains not more than thirty (30) per cent. of water and not more than two and five-tenths (2.5) per cent. of ash.

3. SORGHUM SIRUP is sirup made by the evaporation of sorghum juice or by the solution of sorghum concrete, and contains not more than thirty (30) per cent. of water and not more than two and five-tenths (2.5) per cent. of ash.

4. **MAPLE SIRUP** is sirup made by the evaporation of maple sap or by the solution of maple concrete, and contains not more than thirty-two (32) per cent. of water and not less than forty-five hundredths (0.45) per cent. of maple sirup ash.

5. **SUGAR SIRUP** is the product made by dissolving sugar to the consistence of a sirup and contains not more than thirty-five (35) per cent. of water.

b. Glucose Products.

1. **STARCH SUGAR** is the solid product made by hydrolyzing starch or a starch-containing substance until the greater part of the starch is converted into dextrose. Starch sugar appears in commerce in two forms, anhydrous starch sugar and hydrous starch sugar. The former, crystallized without water of crystallization, contains not less than ninety-five (95) per cent. of dextrose and not more than eight-tenths (0.8) per cent. of ash. The latter, crystallized with water of crystallization, is of two varieties—70 sugar, also known as brewers' sugar, contains not less than seventy (70) per cent. of dextrose and not more than eight-tenths (0.8) per cent. of ash; 80 sugar, climax or acme sugar, contains not less than eighty (80) per cent. of dextrose and not more than one and one-half (1.5) per cent. of ash.

The ash of all these products consists almost entirely of chlorids and sulphates.

2. **GLUCOSE, MIXING GLUCOSE, CONFECTIONER'S GLUCOSE**, is a thick, sirupy, colorless product made by incompletely hydrolyzing starch, or a starch-containing substance, and decolorizing and evaporating the product. It varies in density from forty-one (41) to forty-five (45) degrees Baumé at a temperature of 100° Fahr. (37.7° C.), and conforms in density, within these limits, to the degree Baumé it is claimed to show, and for a density of forty-one (41) degrees Baumé contains not more than twenty-one (21) per cent. and for a density of forty-five (45) degrees not more than fourteen (14) per cent. of water. It contains on a basis of forty-one (41) degrees Baumé not more than one (1) per cent. of ash, containing chiefly of chlorids and sulphates.

c. Candy.

1. **CANDY** is a product made from a saccharine substance or substances with or without the addition of harmless coloring, flavoring, or filling materials and contains no terra alba, barytes, talc, chrome yellow, or other mineral substances, or poisonous colors or flavors, or other ingredients deleterious or detrimental to health, or any vinous, malt, or spirituous liquor or compound, or narcotic drug.

d. Honey.

1. **HONEY** is the nectar and saccharine exudations of plants gathered, modified, and stored in the comb by honey bees (*Apis mellifica* and *A. dorsata*); is laevo-rotary, contains not more than twenty-five (25) per cent. of water, not more than twenty-five hundredths (0.25) per cent. of ash, and not more than eight (8) per cent. of sucrose.

2. **COMB HONEY** is honey contained in the cells of comb.

3. **EXTRACTED HONEY** is honey which has been separated from the uncrushed comb by centrifugal force or gravity.

4. **STRAINED HONEY** is honey removed from the crushed comb by straining or other means.

D. CONDIMENTS (EXCEPT VINEGAR AND SALT).

a. Spices.

1. **SPICES** are aromatic vegetable substances used for the seasoning of food and from which no portion of any volatile oil or other flavoring principle has been removed and which are clean, sound, and true to name.

2. **ALLSPICE, PIMENTO**, is the dried fruit of the *Pimenta pimenta* (L.) Karst., and contains not less than eight (8) per cent. of quercitannic acid*; not more than six (6) per cent. of total ash, not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than twenty-five (25) per cent. of crude fiber.

3. **ANISE** is the fruit of the *Pimpinella anisum* L.

4. **BAY LEAF** is the dried leaf of *Laurus nobilis* L.

5. **CAPERS** are the flower buds of *Capparis spinosa* L.

6. **CARAWAY** is the fruit of *Carum carvi* L.

Cayenne and Red Peppers.

7. **RED PEPPER** is the red, dried, ripe fruit of any species of *Capsicum*.

8. **CAYENNE PEPPER, CAYENNE**, is the dried, ripe fruit of *Capsicum frutescens* L., *Capsicum baccatum* L., or some other small-fruited species of *Capsicum*, and contains not less than fifteen (15) per cent. of nonvolatile ether extract; not more than six and five-tenths (6.5) per cent. of ash insoluble in hydrochloric acid; not more than one and five-tenths (1.5) per cent. of starch, and not more than twenty-eight (28) per cent. of crude fiber.

9. **PAPRIKA** is the dried ripe fruit of *Capsicum annum* L., or some other large-fruited species of *Capsicum*, excluding seeds and stems.

10. **CELERY SEED** is the dried fruit of *Apium graveolens* L.

11. **CINNAMON** is the dried bark of any species of the genus *Cinnamomum* from which the outer layers may or may not have been removed.

12. **TRUE CINNAMON** is the dried inner bark of *Cinnamomum zeylanicum* Breyne.

13. **CASSIA** is the dried bark of various species of *Cinnamomum*, other than *Cinnamomum zeylanicum*, from which the outer layers may or may not have been removed.

14. **CASSIA BUDS** are the dried immature fruit of species of *Cinnamomum*.

15. **GROUND CINNAMON, GROUND CASSIA**, is a powder consisting of cinnamon, cassia, or cassia buds, or a mixture of these spices, and contains not more than six (6) per cent. of total ash and not more than two (2) per cent. of sand.

16. **CLOVES** are the dried flower buds of *Caryophyllus aromaticus* L., which contain not more than five (5) per cent. of clove stems; not less than

*Calculated from the total oxygen absorbed by the aqueous extract.

ten (10) per cent. of volatile ether extract; not less than twelve (12) per cent. of quercitannic acid*; not more than eight (8) per cent. of total ash; not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than ten (10) per cent. of crude fiber.

17. CORIANDER is the dried fruit of *Coriandrum sativum* L.

18. CUMIN SEED is the fruit of *Cuminum cyminum* L.

19. DILL SEED is the fruit of *Anethum graveolens* L.

20. FENNEL is the fruit of *Foeniculum foeniculum* (L.) Karst.

21. GINGER is the washed and dried or decorticated and dried rhizome of *Zinziber zinziber* (L.) Karst., and contains not less than forty-two (42) per cent. of starch; not more than eight (8) per cent. of crude fiber, not more than six (6) per cent. of total ash, not more than one (1) per cent. of lime, and not more than three (3) per cent. of ash insoluble in hydrochloric acid.

22. LIMED GINGER, BLEACHED GINGER, is whole ginger coated with carbonate of lime and contains not more than ten (10) per cent. of ash, not more than four (4) per cent. of carbonate of lime, and conforms in other respects to the standard for ginger.

23. HORSE RADISH is the root of *Roripa armoracia* (L.) Hitchcock, either by itself or ground and mixed with vinegar.

24. MACE is the dried arillus of *Myristica fragrans* Houttuyn, and contains not less than twenty (20) nor more than thirty (30) per cent. of nonvolatile ether extract, not more than three (3) per cent. of total ash, and not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than ten (10) per cent. of crude fiber.

25. MACASSAR MACE, PAPUA MACE, is the dried arillus of *Myristica argentea* Warb.

26. BOMBAY MACE is the dried arillus of *Myristica malabarica* Lamarck.

27. MAJORAM is the leaf, flower and branch of *Majorana majorana* (L.) Karst.

28. MUSTARD SEED is the seed of *Sinapis alba* L. (white mustard), *Brassica nigra* (L.) Koch (black mustard), or *Brassica juncea* (L.) Cosson (black or brown mustard).

29. GROUND MUSTARD is a powder made from mustard seed, with or without the removal of the hulls and a portion of the fixed oil, and contains not more than two and five-tenths (2.5) per cent. of starch and not more than eight (8) per cent. of total ash.

30. PREPARED MUSTARD, GERMAN MUSTARD, FRENCH MUSTARD, MUSTARD PASTE, is a paste composed of a mixture of ground mustard seed or mustard flour with salt, spices and vinegar, and, calculated free from water, fat and salt, contains not more than twenty-four (24) per cent. of carbohydrates calculated as starch, determined according to the official methods, not more than twelve (12) per cent. of crude fiber nor less than thirty-five (35) per cent. of protein, derived solely from the materials named.

31. NUTMEG is the dried seed of the *Myristica fragrans* Houttuyn, deprived of its testa, with or without a thin coating of lime, and contains not less than twenty-five (25) per cent. of nonvolatile ether extract, not more than five (5) per cent. of total ash, not more than five-tenths (0.5)

*Calculated from the total oxygen absorbed by the aqueous extract.

per cent. of ash insoluble in hydrochloric acid, and not more than ten (10) per cent. of crude fiber.

32. MACASSAR NUTMEG, PAPUA NUTMEG, MALE NUTMEG, LONG NUTMEG, is the dried seed of *Myristica argentea* Warb, deprived of its testa.

Pepper.

33. BLACK PEPPER is the dried immature berry of *Piper nigrum* L. and contains not less than six (6) per cent. of nonvolatile ether extract, not less than twenty-five (25) per cent. of starch, not more than seven (7) per cent. of total ash, not more than two (2) per cent. of ash insoluble in hydrochloric acid, and not more than fifteen (15) per cent. of crude fiber. One hundred parts of the nonvolatile ether extract contains not less than three and one-quarter (3.25) parts of nitrogen.

GROUND BLACK PEPPER is the product made by grinding the entire berry and contains the several parts of the berry in their normal proportions.

34. LONG PEPPER is the dried fruit of *Piper longum* L.

35. WHITE PEPPER is the dried mature berry of *Piper nigrum* L. from which the outer coating or the outer and inner coatings have been removed and contains not less than six (6) per cent. of nonvolatile ether extract, not less than fifty (50) per cent. of starch, not more than four (4) per cent. of total ash, not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than five (5) per cent. of crude fiber. One hundred parts of the nonvolatile ether extract contain not less than four (4) parts of nitrogen.

36. SAFFRON is the dried stigma of *Crocus sativus* L.

37. SAGE is the leaf of *Salvia officinalis* L.

38. SAVORY, SUMMER SAVORY, is the leaf, blossom, and branch of *Satureja hortensis* L.

39. THYME is the leaf and tip of blooming branches of *Thymus vulgaris* L.-

b. Flavoring Extracts.*

1. A FLAVORING EXTRACT is a solution in ethyl alcohol of proper strength of the sapid and odorous principles derived from an aromatic plant, or parts of the plant, with or without its coloring matter, and conforms in name to the plant used in its preparation.

2. ALMOND EXTRACT is the flavoring extract prepared from oil of bitter almonds, free from hydrocyanic acid, and contains not less than one (1) per cent. by volume of oil of bitter almonds.

2a. OIL OF BITTER ALMONDS, commercial, is the volatile oil obtained from the seed of the bitter almond (*Amygdalus communis* L.), the apricot (*Prunus armeniaca* L.), or the peach (*Amygdalus persica* L.).

3. ANISE EXTRACT is the flavoring extract prepared from oil of anise, and contains not less than three (3) per cent. by volume of oil of anise.

3a. OIL OF ANISE is the volatile oil obtained from the anise seed.

4. CELERY SEED EXTRACT is the flavoring extract prepared from celery seed or the oil of celery seed, or both, and contains not less than three-tenths (0.3) per cent. by volume of oil of celery seed.

*The flavoring extracts herein described are intended solely for food purposes and are not to be confounded with similar preparations described in the Pharmacopœia for medicinal purposes.

4a. OIL OF CELERY SEED is the volatile oil obtained from celery seed.

5. CASSIA EXTRACT is the flavoring extract prepared from oil of cassia and contains not less than two (2) per cent. by volume of oil of cassia.

5a. OIL OF CASSIA is the lead-free volatile oil obtained from the leaves of bark of *Cinnamomum cassia* Bl., and contains not less than seventy-five (75) per cent. by weight of cinnamic aldehyde.

6. CINNAMON EXTRACT is the flavoring extract prepared from oil of cinnamon, and contains not less than two (2) per cent. by volume of oil of cinnamon.

6a. OIL OF CINNAMON is the lead-free volatile oil obtained from the bark of the Ceylon cinnamon (*Cinnamomum zeylanicum* Breyne), and contains not less than sixty-five (65) per cent. by weight of cinnamic aldehyde and not more than ten (10) per cent. by weight of augenol.

7. CLOVE EXTRACT is the flavoring extract prepared from oil of cloves, and contains not less than two (2) per cent. by volume of oil of cloves.

7a. OIL OF CLOVES is the lead-free, volatile oil obtained from cloves.

8. GINGER EXTRACT is the flavoring extract prepared from ginger and contains in each one hundred (100) cubic centimeters, the alcohol-soluble matters from not less than twenty (20) grams of ginger.

9. LEMON EXTRACT is the flavoring extract prepared from oil of lemon, or from lemon peel, or both, and contains not less than five (5) per cent. by volume of oil of lemon.

9a. OIL OF LEMON is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the lemon (*Citrus limonum* L.), has an optical rotation (25° C.) of not less than +60° in a 100-millimeter tube, and contains not less than four (4) per cent. by weight of citral.

10. TERPENELESS EXTRACT OF LEMON is the flavoring extract prepared by shaking oil of lemon with dilute alcohol, or by dissolving terpeneless oil of lemon in dilute alcohol, and contains not less than two-tenths (0.2) per cent. by weight of citral derived from oil of lemon.

10a. TERPENELESS OIL OF LEMON is oil of lemon from which all or nearly all of the terpenes have been removed.

11. NUTMEG EXTRACT is the flavoring extract prepared from oil of nutmeg, and contains not less than two (2) per cent. by volume of oil of nutmeg.

11a. OIL OF NUTMEG is the volatile oil obtained from nutmegs.

12. ORANGE EXTRACT is the flavoring extract prepared from oil of orange, or from orange peel, or both, and contains not less than five (5) per cent. by volume of oil of orange.

12a. OIL OF ORANGE is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the orange (*Citrus aurantium* L.) and has an optical rotation (25° C.) of not less than +95° in a 100-millimeter tube.

13. TERPENELESS EXTRACT OF ORANGE is the flavoring extract prepared by shaking oil of orange with dilute alcohol, or by dissolving terpeneless oil of orange in dilute alcohol, and corresponds in flavoring strength to orange extract.

13a. TERPENELESS OIL OF ORANGE is oil of orange from which all or nearly all of the terpenes have been removed.

14. PEPPERMINT EXTRACT is the flavoring extract prepared from oil of peppermint, or from peppermint, or both, and contains not less than three (3) per cent. by volume of oil of peppermint.

14a. PEPPERMINT is the leaves and flowering tops of *Mentha pip-
p-rita* L.

14b. OIL OF PEPPERMINT is the volatile oil obtained from peppermint and contains not less than fifty (50) per cent. by weight of menthol.

15. ROSE EXTRACT is the flavoring extract prepared from otto of roses, with or without red rose petals, and contains not less than four-tenths (0.4) per cent. by volume of otto of roses.

15a. OTTO OF ROSES is the volatile oil obtained from the petals of *Rosa damascena* Mill., *R. centifolia* L., or *R. moschata* Herrm.

16. SAVORY EXTRACT is the flavoring extract prepared from oil of savory, or from savory, or both, and contains not less than thirty-five hundredths (0.35) per cent. by volume of oil of savory.

16a. OIL OF SAVORY is the volatile oil obtained from savory.

17. SPEARMINT EXTRACT is the flavoring extract prepared from oil of spearmint, or from spearmint, or both, and contains not less than three (3) per cent. by volume of oil of spearmint.

17a. SPEARMINT is the leaves and flowering tops of *Mentha spicata* L.

17b. OIL OF SPEARMINT is the volatile oil obtained from spearmint.

18. STAR ANISE EXTRACT is the flavoring extract prepared from oil of star anise, and contains not less than three (3) per cent. by volume of oil of star anise.

18a. OIL OF STAR ANISE is the volatile oil distilled from the fruit of the star anise (*Illicium verum* Hook).

19. SWEET BASIL EXTRACT is the flavoring extract prepared from oil of sweet basil, or from sweet basil, or both, and contains not less than one-tenth (0.1) per cent. by volume of oil of sweet basil.

19a. SWEET BASIL is the leaves and tops of *Ocimum basilicum* L.

19b. OIL OF SWEET BASIL is the volatile oil obtained from basil.

20. SWEET MARJORAM EXTRACT, MARJORAM EXTRACT, is the flavoring extract prepared from the oil of marjoram, or from marjoram, or both, and contains not less than one (1) per cent. by volume of oil of marjoram.

20a. OIL OF MARJORAM is the volatile oil obtained from marjoram.

21. THYME EXTRACT is the flavoring extract prepared from oil of thyme, or from thyme, or both, and contains not less than two-tenths (0.2) per cent. by volume of oil of thyme.

21a. OIL OF THYME is the volatile oil obtained from thyme.

22. TONKA EXTRACT is the flavoring extract prepared from tonka bean, with or without sugar or glycerin, and contains not less than one-tenth (0.1) per cent. by weight of coumarin extracted from the tonka bean, together with a corresponding proportion of the other soluble matters thereof.

22a. TONKA BEAN is the seed of *Coumarouna odorata* Aublet (*Dipteryx odorata* (Aubl.) Willd.).

23. VANILLA EXTRACT is the flavoring extract prepared from vanilla bean, with or without sugar or glycerin, and contains in one hundred (100) cubic centimeters the soluble matters from not less than ten (10) grams of the vanilla bean.

23a. VANILLA BEAN is the dried, cured fruit of *Vanilla planifolia* Andrews.

24. WINTERGREEN EXTRACT is the flavoring extract prepared from oil of wintergreen, and contains not less than three (3) per cent. by volume of oil of wintergreen.

24a. OIL OF WINTERGREEN is the volatile oil distilled from the leaves of the *Gaultheria procumbens* L.

c. Edible Vegetable Oils and Fats.

1. OLIVE OIL is the oil obtained from the sound, mature fruit of the cultivated olive tree (*Olea europaea* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-six hundred and sixty ten-thousandths (1.4660) and not exceeding one and forty-six hundred and eighty ten-thousandths (1.4680); and an iodine number not less than seventy-nine (79) and not exceeding ninety (90).

2. VIRGIN OLIVE OIL is olive oil obtained from the first pressing of carefully selected, hand-picked olives.

3. COTTON-SEED OIL is the oil obtained from the seeds of cotton plants (*Gossypium hirsutum* L., *G. barbadense* L., or *G. herbaceum* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-seven hundred ten-thousandths (1.4700) and not exceeding one and forty-seven hundred and twenty-five ten-thousandths (1.4725); and an iodine number not less than one hundred and four (104) and not exceeding one hundred and ten (110).

4. "WINTER-YELLOW" COTTON-SEED OIL is expressed cotton-seed oil from which a portion of the stearin has been separated by chilling and pressure, and has an iodine number not less than one hundred and ten (110) and not exceeding one hundred and sixteen (116).

5. PEANUT OIL, ARACHIS OIL, EARTHNUIT OIL, is the oil obtained from the peanut (*Arachis hypogaea* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-six hundred and ninety ten-thousandths (1.4690) and not exceeding one and forty-seven hundred and seven ten-thousandths (1.4707); and an iodine number not less than eighty-seven (87) and not exceeding one hundred (100).

6. "COLD-DRAWN" PEANUT OIL is peanut oil obtained by pressure without heating.

7. SESAME OIL, GINGILI OIL, TEEL OIL, is the oil obtained from the seeds of the sesame plants (*Sesamum orientale* L. and *S. radiatum* Schum and Thonn.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-seven hundred and four ten-thousandths (1.4704) and not exceeding one and forty-seven hundred and seventeen ten-thousandths (1.4717); and an iodine number not less than one hundred and three (103) and not exceeding one hundred and twelve (112).

8. "COLD-DRAWN" SESAME OIL is sesame oil obtained by pressure without heating.

9. POPPY-SEED OIL is the oil obtained from the seed of the poppy (*Papaver somniferum* L.) subjected to the usual refining processes and free from rancidity.

10. WHITE POPPY-SEED OIL, "COLD-DRAWN" POPPY-SEED OIL, is poppy-seed oil of the first pressing without heating.

11. COCONUT OIL is the oil obtained from the kernels of the coconut (*Cocos nucifera* L.) and subjected to the usual refining processes and free from rancidity.

12. COCHIN OIL is coconut oil prepared in Cochin (Malabar).

13. CEYLON OIL is coconut oil prepared in Ceylon.

14. COPRA OIL is coconut oil prepared from copra, the dried kernels of the coconut.

15. RAPE-SEED OIL, COLZA OIL, is the oil obtained from the seeds of the rape plant (*Brassica napus* L.) and subjected to the usual refining processes and free from rancidity.

16. "COLD-DRAWN" RAPE-SEED OIL is rape-seed oil obtained by the first pressing without heating.

17. SUNFLOWER OIL is the oil obtained from the seeds of the sunflower (*Helianthus annuus* L.) and subjected to the usual refining processes and free from rancidity.

18. "COLD-DRAWN" SUNFLOWER OIL is sunflower oil obtained by the first pressing without heating.

19. MAIZE OIL, CORN OIL, is the oil obtained from the germ of the maize (*Zea mays* L.) and subjected to the usual refining processes and free from rancidity.

20. COCOA BUTTER, CACAO BUTTER, is the fat obtained from roasted, sound cocoa beans, and subjected to the usual refining processes; is free from rancidity; has a refractive index (40° C.) not less than one and forty-five hundred and sixty-six ten-thousandths (1.4566) and not exceeding one and forty-five hundred and ninety-eight ten-thousandths (1.4598), an iodine number not less than thirty-three (33) and not exceeding thirty-eight (38); and a melting point not lower than 30° C. nor higher than 35° C.

21. COTTON-SEED OIL STEARIN is the solid product made by chilling cotton-seed oil and separating the solid portion by filtration, with or without pressure, and having an iodine number not less than eighty-five (85) and not more than one hundred (100).

E. TEA, COFFEE, AND COCOA PRODUCTS.

a. Tea.

1. TEA is the leaves and leaf buds of different species of *Thea*, prepared by the usual trade processes of fermenting, drying, and firing; meets the provisions of the act of Congress approved March 2, 1897, and the regulations made in conformity therewith (Treasury Department Circular 16, February 6, 1905); conforms in variety and place of production to the name it bears; and contains not less than four (4) nor more than seven (7) per cent. of ash.

b. Coffee.

1. COFFEE is the seed of *Coffea arabica* L. or *Coffea liberica* Bull., freed from all but a small portion of its spermoderm, and conforms in variety and place of production to the name it bears.

2. ROASTED COFFEE is coffee which by the action of heat has become brown and developed its characteristic aroma, and contains not less than ten (10) per cent. of fat and not less than three (3) per cent. of ash.

c. Cocoa and Cocoa Products.

1. COCOA BEANS are the seeds of the cacao tree, *Theobroma cacao* L.

2. COCOA NIBS CRACKED COCOA, is the roasted, broken cocoa bean freed from its shell or husk,

3. CHOCOLATE, PLAIN CHOCOLATE, BITTER CHOCOLATE, CHOCOLATE LIQUOR, BITTER CHOCOLATE COATINGS, is the solid or plastic mass obtained by grinding cocoa nibs without the removal of fat or other constituents except the germ, and contains not more than three (3) per cent. of ash insoluble in water, three and fifty hundredths (3.50) per cent. of crude fiber, and nine (9) per cent. of starch, and not less than forty-five (45) per cent. of cocoa fat.

4. SWEET CHOCOLATE, SWEET CHOCOLATE COATINGS, is chocolate mixed with sugar (sucrose), with or without the addition of cocoa butter, spices, or other flavoring materials, and contains in the sugar and fat-free residue no higher percentage of either ash, fiber, or starch than is found in the sugar and fat-free residue of chocolate.

5. COCOA, POWDERED COCOA, is cocoa nibs, with or without the germ, deprived of a portion of its fat and finely pulverized, and contains percentages of ash, crude fiber, and starch corresponding to those in chocolate after correction for fat removed.

6. SWEET COCOA, SWEETENED COCOA, is cocoa mixed with sugar (sucrose), and contains not more than sixty (60) per cent. of sugar (sucrose), and in the sugar and fat-free residue no higher percentage of either ash, crude fiber, or starch than is found in the sugar and fat-free residue of chocolate.

F. BEVERAGES.

Fermented Fruit Juices.

1. WINE is the product made by the normal alcoholic fermentation of the juice of sound, ripe grapes, and the usual cellar treatment, and contains not less than seven (7) nor more than sixteen (16) per cent. of alcohol, by volume, and, in one hundred (100) cubic centimeters (20° C.), not more than one-tenth (0.1) gram of sodium chlorid nor more than two-tenths (0.2) gram of potassium sulphate; and for red wine not more than fourteen hundredths (0.14) gram, and for white wine not more than twelve hundredths (0.12) gram of volatile acids produced by fermentation and calculated as acetic acid. Red wine is wine containing the red coloring matter of the skins of grapes. White wine is wine made from white grapes or the expressed fresh juice of other grapes.

2. DRY WINE is wine in which the fermentation of the sugars is practically complete and which contains, in one hundred (100) cubic centimeters (20° C.), less than one (1) gram of sugars and for dry red wine not less than sixteen hundredths (0.16) gram of grape ash and not less than one and six-tenths (1.6) grams of sugar-free grape solids, and for dry white wine not less than thirteen hundredths (0.13) gram of grape ash and not less than one and four-tenths (1.4) grams of sugar-free grape solids.

3. FORTIFIED DRY WINE is dry wine to which brandy has been added but which conforms in all other particulars to the standard of dry wine.

4. SWEET WINE is wine in which the alcoholic fermentation has been arrested and which contains in one hundred (100) cubic centimeters (20°

C.), not less than one (1) gram of sugars, and for sweet red wine not less than sixteen hundredths (0.16) gram of grape ash, and for sweet white wine not less than thirteen hundredths (0.13) gram of grape ash.

5. FORTIFIED SWEET WINE is sweet wine to which wine spirits have been added. By act of Congress, "sweet wine" used for making fortified sweet wine and "wine spirits" used for such fortification are defined as follows (sec. 43, Act of October 1, 1890, 26 Stat., 567, as amended by section 68, Act of August 27, 1894, 28 Stat., 509, and further amended by Act of Congress approved June 7, 1906): "That the wine spirits mentioned in section 42 of this act is the product resulting from the distillation of fermented grape juice to which water may have been added prior to, during, or after fermentation, for the sole purpose of facilitating the fermentation and economical distillation thereof, and shall be held to include the products from grapes or their residues, commonly known as grape brandy; and the pure sweet wine, which may be fortified free of tax, as provided in said section, is fermented grape juice only, and shall contain no other substance whatever introduced before, at the time of, or after fermentation, except as herein expressly provided; and such sweet wine shall contain not less than four per centum of saccharine matter, which saccharine strength may be determined by testing with Balling's saccharometer or must scale, such sweet wine, after the evaporation of the spirits contained therein, and restoring the sample tested to original volume by addition of water: Provided, That the addition of pure boiled or condensed grape must or pure crystallized cane or beet sugar or pure anhydrous sugar to the pure grape juice aforesaid, or the fermented product of such grape juice prior to the fortification provided by this act for the sole purpose of perfecting sweet wine according to commercial standard, or the addition of water in such quantities only as may be necessary in the mechanical operation of grape conveyers, crushers, and pipes leading to fermenting tanks, shall not be excluded by the definition of pure sweet wine aforesaid: Provided, however, That the cane or beet sugar, or pure anhydrous sugar, or water, so used shall not in either case be in excess of ten (10) per centum of the weight of the wine to be fortified under this act: And provided further, That the addition of water herein authorized shall be under such regulations and limitations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may from time to time prescribe; but in no case shall such wines to which water has been added be eligible for fortification under the provisions of this act where the same, after fermentation and before fortification, have an alcoholic strength of less than five per centum of their volume."

6. SPARKLING WINE is wine in which the after part of the fermentation is completed in the bottle, the sediment being disgorged and its place supplied by wine or sugar liquor, and which contains, in one hundred (100) cubic centimeters (20° C.), not less than twelve hundredths (0.12) gram of grape ash.

7. MODIFIED WINE, AMELIORATED WINE, CORRECTED WINE, is the product made by the alcoholic fermentation, with the usual cellar treatment, of a mixture of the juice of sound, ripe grapes with sugar (sucrose), or a sirup containing not less than sixty-five (65) per cent. of sugar (sucrose),

and in quantity not more than enough to raise the alcoholic strength after fermentation, to eleven (11) per cent. by volume.

8. RAISIN WINE is the product made by the alcoholic fermentation of an infusion of dried or evaporated grapes, or of a mixture of such infusion or of raisins with grape juice.

G. VINEGAR.

1. VINEGAR, CIDER VINEGAR, APPLE VINEGAR, is the product made by the alcoholic and subsequent acetous fermentations of the juice of apples; is laevo-rotatory, and contains not less than four (4) grams of acetic acid, not less than one and six-tenths (1.6) grams of apple solids, of which not more than fifty (50) per cent. are reducing sugars, and not less than twenty-five hundredths (0.25) gram of apple ash in one hundred (100) cubic centimeters (20° C.); and the water-soluble ash from one hundred (100) cubic centimeters (20° C.) of the vinegar contains not less than ten (10) milligrams of phosphoric acid (P_2O_5), and requires not less than thirty (30) cubic centimeters of decinormal acid to neutralize its alkalinity.

2. WINE VINEGAR, GRAPE VINEGAR, is the product made by the alcoholic and subsequent acetous fermentations of the juice of grapes and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4.0) grams of acetic acid, not less than one (1.0) gram of grape solids and not less than thirteen hundredths (0.13) gram of grape ash.

3. MALT VINEGAR is the product made by the alcoholic and subsequent acetous fermentations, without distillation, of an infusion of barley malt or cereals whose starch has been converted by malt, is dextro-rotatory and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid, not less than two (2) grams of solids and not less than two-tenths (0.2) gram of ash; and the water-soluble ash from one hundred (100) cubic centimeters (20° C.) of the vinegar contains not less than nine (9) milligrams of phosphoric acid (P_2O_5), and requires not less than four (4) cubic centimeters of decinormal acid to neutralize its alkalinity.

4. SUGAR VINEGAR is the product made by the alcoholic and subsequent acetous fermentations of solutions of sugar, sirup, molasses, or refiners' sirup, and contains, in one hundred (100) cubic centimeters (20° C.) not less than four (4) grams of acetous acid.

5. GLUCOSE VINEGAR is the product made by the alcoholic and subsequent acetous fermentations of solutions of starch sugar or glucose, is dextro-rotatory, and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid.

6. SPIRIT VINEGAR, DISTILLED VINEGAR, GRAIN VINEGAR, is the product made by the acetous fermentation of dilute distilled alcohol, and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid.

III. SALT.

1. TABLE SALT, DAIRY SALT, is fine-grained crystalline salt containing on a water-free basis, not more than one and four-tenths (1.4) per cent of calcium sulphate ($CaSO_4$), nor more than five-tenths (0.5) per cent of calcium and magnesium chlorids ($CaCl_2$ and $MgCl_2$), nor more than one-tenth (0.1) per cent. of matters insoluble in water.

RULES FOR THE ENFORCEMENT OF THE PURE FOOD AND DRUG LAW.

RULE 1.

SHORT TITLE OF THE ACT.

The Act entitled an Act forbidding the manufacture, sale or offering for sale of any adulterated or misbranded foods or drugs, defining foods and drugs, stating wherein adulteration and misbranding of foods and drugs consist, and defining the duties of the State Board of Health in relation to foods and drugs, their inspection, purity and misbranding, regulating the slaughter of animals and their preparation for food, providing an appropriation for enforcement, providing for the appointment of a state food and drug commissioner, declaring penalties for the violation of the laws, rules and ordinances concerning foods and drugs, repealing acts in conflict therewith, and declaring an emergency, signed March 4, 1907, shall be known and referred to as "The Indiana Pure Food and Drug Law."

RULE 2.

ENFORCEMENT.

The enforcement of the law is made the duty of the State Board of Health through its Chemist, who is the State Food and Drug Commissioner. The state, county and town health officers are food and drug inspectors, together with the deputy state health officers, subordinate to the State Board of Health, and are authorized agents of the board for the enforcement of the law.

RULE 3.

DUTY OF INSPECTORS.

It shall be the duty of the deputy state health officers and food and drug inspectors:

1. To collect samples of foods and drugs for examination and analysis;
2. To inspect dairies, creameries, cheese factories and other places where milk products are made and prepared;
3. To inspect stockyards, abattoirs and slaughter houses where animals are kept for slaughter, slaughtered and prepared for market;
4. To inspect canning factories, confectioners' factories, pickling factories, syrup refineries, bottling works, breweries, drug manufactories and other places where foods and drugs are made and prepared.
5. To inspect grocery stores, meat markets, fish markets, drug stores and all other places dealing in or selling food and drugs;
6. To inspect bakeries, bakeshops and other places where bread, cake, pastries, confections and similar products are prepared for sale;
7. To inspect restaurants, hotels and other public places where food is prepared and sold;
8. To confer with health and sanitary officers in regard to the proper enforcement of the Pure Food and Drug Laws;

9. To assist local officials in the prosecution of violations of the Food and Drug Laws.

The state food and drug inspectors shall make daily reports to the State Food and Drug Commissioner, and shall receive all orders from him pertaining to food and drugs.

It shall be the further duty of the deputy state health officers and food and drug inspectors to inspect the conditions of each county, and city and town health office and to make correct reports to the secretary of the board each day of any conditions found to exist.

Inspectors shall conduct their examinations quietly and in such a manner that no unnecessary antagonism will be aroused against their work. They will remember always that it is the policy of the Board of Health to co-operate with manufacturers, wholesalers and retailers in securing pure goods.

COLLECTION OF SAMPLES.

Inspectors shall make collections of food and drug samples in the following manner:

Samples of food and drugs shall be purchased and paid for, and whenever possible, a receipt shall be obtained from the dealer, and numbered to correspond with the number placed on the sample.

When possible all samples of food and drugs shall be original packages, and when impossible, as in the case of cheese, milk, butter, bulk spices, vinegar, bulk chemicals, extracts, syrups, tinctures, etc., samples shall be placed in suitable packages or containers and properly marked and labeled.

The quantity of bulk goods shall not be less than six ounces, and all liquids not less than one pint, except where the character of the sample is such that only a small quantity is required for examination and analysis.

In collecting samples of foods and drugs, duplicate, sealed samples will be left with the dealer if he so requests.

Samples of liquids, bulk goods, such as vinegar, milk, molasses, flour, sugar, etc., shall be securely sealed before they leave the hands of the collector, and preferably in the presence of the dealer.

At the time of the collection the sample shall be given a serial number known as the "Inspector's collection number." This serial number will be noted in the inspector's blanks together with the name of manufacturer, retailer, town, county, brand, date of collection and such other information as may be necessary to identify the sample. This data shall be kept in duplicate and each day copies of the descriptions of all samples collected shall be forwarded to the State Food and Drug Commissioner. The original copy will remain in the possession of the inspector to be used by him in conducting prosecutions.

Samples shall be brought to the laboratory and placed by the inspector in a case suitably provided with lock and two keys, one key to be retained by the inspector, the other is deposited with the State Food and Drug Commissioner.

When samples can not be brought to the laboratory by the inspector, they may be shipped by express to the State Food and Drug Commissioner as often as may be necessary. The box containing the samples shall be

sealed and receipts for the same from the express companies retained by the inspector.

Inspectors, while traveling in parts of the state from which they are unable to return to their home at night, will be allowed reasonable hotel bills.

Inspectors will be allowed car fare to the extent of the smallest fare between points, and necessary livery and express bills.

Inspectors shall keep an accurate account of their expenses and shall return vouchers or receipts for same at the end of the week, and no expense incurred by inspectors will be allowed unless accompanied by properly-signed vouchers or receipts. Vouchers or receipts will not be required for railroad fare.

RULE 4.

METHODS OF ANALYSIS.

Unless otherwise directed by the State Food and Drug Commissioner, the methods of analysis employed shall be those prescribed by the Association of Official Agricultural Chemists and the U. S. Pharmacopœia.

RULE 5.

PROCEDURE IN CASE OF VIOLATION OF THE LAW.

Whenever upon analysis or examination it appears that samples of food or drugs are adulterated in violation of the Pure Food and Drug Law, the State Food and Drug Commissioner or other authorized officers of the State Board of Health, shall furnish evidence to district prosecutors, who will proceed according to the commands of the act as set forth in section 11 of the law.

Whenever upon inspection a dairy, abattoir, slaughterhouse, bakery or other place of manufacture of food or drug products is found to be uncleanly or otherwise conducted in an unwholesome or unsanitary manner, the inspector shall at once report such findings to the state health officer and said inspectors shall direct the manufacturers, owners or operators of such dairies, abattoirs, slaughterhouses, bakeries, etc., to make within a specified time the changes necessary to comply with the statutes and the rules of the State Board of Health concerning the same.

RULE 6.

HEARINGS.

Whenever the owner, proprietor or agent of any firm or corporation engaged in the manufacture and sale of food or drug products shall have been notified by an inspector of the State Board of Health that his place of business is not conducted in accordance with the law and the rules of the State Board of Health, he may within five days from the date of said notice, make a written plea to the secretary of the State Board of Health, asking that a hearing be given him at the office of the state board, and at the time appointed he may appear to give reasons why the conditions noted by the inspector existed, and why he should not comply

with the order of the state inspector or be prosecuted; the said hearing to be before the secretary of the State Board and the State Food and Drug Commissioner.

RULE 7.

PUBLICATION.

The State Food and Drug Commissioner shall from time to time publish in the monthly Bulletin of the Indiana State Board of Health or in such other manner as may be approved by the secretary of the board, reports of the operation of the food and drug law. Such reports may include the results of analyses of samples collected by the food and drug inspectors, statements as to the condition of dairies, abattoirs, slaughterhouses, bakeries, drug stores and other food and drug manufacturing establishments, records of legal proceedings instituted against violators of the food and drug law, and such other matters as may be of value and interest to dealers in food products and to the public.

RULE 8.

GUARANTY.

The provisions of section 6 of the Pure Food and Drug Law shall be observed by inspectors whenever the goods purchased or examined are in an original, unbroken package. The term "Original, unbroken package" as used in this act, is the original package, carton, case, can, box, barrel, bottle, phial, or other receptacle put up by the manufacturer, to which the label is attached, or which may be suitable for the attachment of a label making one complete package of the food or drug article. The original package contemplated includes both the wholesale and the retail package.

ADULTERATION.

RULE 9.

SUBSTANCES MIXED WITH FOODS.

No substance may be mixed with a food product that will lower or reduce its strength. Substances properly used in the preparation of food products for the purpose of clarifying or refining and eliminated in a further process of manufacture, are not included under this provision. The sale of spices containing inert and foreign materials such as cereals, ground olive stones, cocoanut shells, etc., is prohibited.

RULE 10.

COLORING, POWDERING, COATING AND STAINING.

1. Only harmless colors may be used in food products, and then only when the use of such colors does not make the article appear better or of greater value than it really is.
2. The reduction of a substance to a powder to conceal inferiority in character is prohibited.

3. The term "powdered" means the application of any powdered substance to the exterior portion of articles of food, or the reduction of a substance to a powder.

4. The term "coated" means the application of any substance to the exterior portion of a food product.

5. The term "stained" includes any change produced by the addition of any substance to the exterior portion of foods which in any way alters their natural tint.

RULE 11.

NATURAL, POISONOUS OR DELETERIOUS INGREDIENTS.

Any food product which contains naturally a poisonous or deleterious ingredient does not come within the provisions of the Pure Food and Drug Law, except when the presence of such ingredient is due to filth, putrescence or decomposition.

RULE 12.

PRESERVATIVES.

The presence of any added antiseptic or preservative substance, except common table salt, saltpeter, cane sugar, vinegar, spices, or, in smoked food, the natural product of the smoking process, constitutes an adulteration. The use of salicylic acid, benzoic acid, boric acid, hydrofluoric acid, sulphurous acid, and compounds or salts of these acids; formaldehyde or formalin and the various mixtures known to the trade as "freezine," "iceine," "formol," "preservalines" of various kinds, saccharine, betanaphthol or any other preservatives or their compounds injurious to health is prohibited: Provided, however, That until further notice benzoate of soda may be employed in quantities not to exceed one-tenth of 1 per cent. for the preservation of tomato catsup. A statement to the effect that benzoate of soda is used must be plainly printed upon the principal label.

RULE 13.

DYES AND COLORING MATTER.

The use of dyes and coloring matter in food products is prohibited wherever such dye or color is used for the purpose of making the product appear better or of greater value than it really is, or of counterfeiting the appearance of natural food products. This regulation does not prohibit the use of harmless dye colors in confectionery, iceings, dessert preparations, etc., nor of color used in butter and cheese manufacture. Dyes and coloring matter shall not be used in preparation of meat products, such as sausage, minced meats, etc., where the color is incorporated with the product in the process of manufacture. The practice of dipping sausage for the purpose of imparting a color to the casing only, is not prohibited.

RULE 14.

CHARACTER OF RAW MATERIAL.

The raw material used in the manufacture of food and drug products shall be sound, wholesome and free from decomposition. The meat products shall be sound, wholesome and fit for human food, and shall be

made from sound and healthy animals slaughtered and prepared in accordance with section 4 of the Pure Food and Drug Law. Carcasses of animals too immature to produce wholesome meat, of unborn and stillborn animals, carcasses of pigs, kids and lambs under three weeks of age, and of calves less than four weeks of age, shall be condemned as unsuitable for food. Carcasses of animals in advanced stages of pregnancy, also carcasses of animals which have within 10 days given birth to young, and in which there is no evidence of septic poisoning, may be rendered into lard or tallow if so desired, otherwise they shall be condemned as unsuitable for food. All animals that die in abattoirs, pens and those in a dying condition before slaughtering shall not be used as food. In enforcing the provisions of the Pure Food Law in relation to meat and meat products, inspectors will follow the regulations laid down for the instruction of inspectors of the Bureau of Animal Industry of the U. S. Department of Agriculture.

MISBRANDING.

RULE 15.

LABELING.

(a) The term "label" applies to any printed, pictorial, or other matter upon or attached to any package of a food or drug product, or any container thereof.

(b) The principal label shall consist, first, of all words which the food and drug act, June 30, 1906, specifically requires, to wit, the name of the substance or product; the name of place of manufacture in the case of food compounds or mixtures; words which show that the articles are compounds, mixtures, or blends; the words "compound," "mixture," or "blend"; or words designating the substances or their derivatives and proportions required to be named in the case of drugs and foods. All these required words shall appear upon the principal label with no intervening descriptive or explanatory reading matter. Second, if the name of the manufacturer and place of manufacture are given, they shall also appear upon the principal label. Third, elsewhere upon the principal label other matter may appear in the discretion of the manufacturer.

(c) The principal label on foods or drugs for domestic commerce shall be printed in English (except as provided in Regulation 19), with or without the foreign label in the language of the country where the food or drug product is produced or manufactured. The size of type shall not be smaller than 8-point (brevier) caps: Provided, That in case the size of the package will not permit the use of 8-point cap type the size of the type may be reduced proportionately.

(d) The form, character, and appearance of the labels, except as provided above, are left to the judgment of the manufacturer.

(e) Descriptive matter upon the label shall be free from any statement, design, or device regarding the article or the ingredients or substances contained therein, or quality thereof, or place of origin, which is false or misleading in any particular.

(f) An article containing more than one food product or active medicinal agent is misbranded if named after a single constituent.

In the case of drugs the nomenclature employed by the United States Pharmacopoeia and the National Formulary shall obtain.

(g) The term "design" or "device" applies to pictorial matter of every description, and to abbreviations, characters, or signs for weights, measures, or names of substances.

(h) The use of any false or misleading statement, design or device shall not be justified by any statement given as the opinion of an expert or other person, appearing on any part of the label, nor by any descriptive matter explaining the use of the false or misleading statement, design, or device.

SANITARY CONDITIONS.

RULE 16.

DAIRIES.

Section 3 of the Pure Food and Drug Law provides that milk shall not be sold, exchanged or delivered that is adulterated by the addition of water, color, preservatives or other foreign substances. Milk from which the cream or a part thereof has been removed; or milk kept and handled under conditions which are not sanitary shall be considered to be adulterated. Inspectors shall note the following conditions as defining cleanly and sanitary conditions.

THE BUILDINGS.

Buildings used for cowstables, dairies and milk rooms shall be well ventilated, properly lighted and provided with floors of plank, cement or other material which can be thoroughly washed and cleaned. The stables and milk room shall be kept reasonably well painted or whitewashed. The premises must be at all times clean and free from rubbish, standing water and any offensive material. Horses, hogs and poultry shall not be kept in cowstables.

THE EMPLOYEES.

No person suffering with any contagious or infectious disease or who has been exposed shall be employed about the dairy, or in milking or handling the milk or milk utensils. Employees handling milk and milk utensils must be cleanly in their habits, and the garments worn by such employees shall be kept in a clean condition.

THE MILK.

Milk shall not be drawn from the udder until the same has been properly cleaned by brushing or washing. The milk shall not be kept for sale or stored in any room used for sleeping or domestic purposes. No milk bottle or other container (when taken from the consumer's residence) shall be refilled until it has been returned to the dairy or milk depot and thoroughly cleaned and sterilized. Milk shall be taken from the stable as soon as drawn, cooled immediately, and kept thereafter until delivered at a temperature not exceeding 60 degrees Fahr.

BAKERIES.

(1) The floors, side-walls, ceilings, fixtures, furniture, and utensils of every establishment or place where food products are manufactured or stored, shall at all times be kept in a clean, healthful and sanitary condition.

The side-walls and ceilings of every bake room or confectionery shall be well plastered, wainscoted or ceiled with metal or lumber. Plastered walls and ceilings shall be oil painted or kept well lime washed and all interior woodwork in every bakery or confectionery shall be kept well oiled or painted with oil paint and kept washed clean with soap and water. And every building, room, basement, or cellar occupied or used for the manufacture of any food products shall have, if deemed necessary by the State Health Officer, an impermeable floor made of cement or tile laid in cement.

(2) The sleeping place or places for the persons employed in a bake-shop shall be separate and apart from the bake room; and no persons shall be allowed to sleep in a bake room or place where flour or meal or the products thereof are stored. No domestic animal except cats shall be permitted to remain in a bake room or place used for the storage of flour or meal food products.

(3) No employer shall knowingly require, permit or suffer any person to work in a bakery or confectionery who is affected with consumption of the lungs, or with scrofula, or with any venereal disease or with any communicable skin disease. Cuspidors shall be provided by the owner or operator for each workroom of every bakery or confectionery, and no employe or other person shall expectorate on the floor or side-walls of any bakery or confectionery or place where the manufacture of any food product is conducted. Plain notices shall be posted in every place where food products of any kind are produced forbidding all persons expectorating on the floors of such establishment.

(4) The door and window openings of every food-producing establishment during fly season shall be fitted with self-closing wire screen doors and top outward-tipping wire window screens.

(5) Every bakery and confectionery shall be provided with wash-room and water-closet or closets but separate and apart from the bake room or rooms where the manufacture of any food product is conducted.

ABATTOIRS AND SLAUGHTERHOUSES.

Inspectors of abattoirs and slaughterhouses shall determine unsanitary conditions as provided and defined in Section 4 of the Pure Food and Drug Law.

GROCERIES AND MEAT MARKETS.

Inspectors of groceries and meat markets shall be guided by the following conditions: Sanitary conditions shall exist in groceries and meat markets: When the floors are clean and free from litter and accumulated dirt; when the side walls and ceilings are free from cobwebs, dust and accumulated dirt; when the counters, shelves, drawers and bins are clean and free from foreign odors; when the refrigerators, iceboxes, meat boxes, etc., are well ventilated and free from foul and unpleasant

odors, fungus growths, mold and slime. Meat, fruit, vegetables, bread and pastry shall not be wrapped in newspapers or other unclean papers. Doors and windows shall be provided with efficient screens during the season for flies, and meats exposed for sale shall be protected from flies and dust. Backshops and cellars must be kept clean and well ventilated and lighted. Persons suffering from cancer or any contagious or infectious disease or who have been exposed to a quarantinable disease, shall not be employed in groceries, dairies, meat markets or other places where foods and drugs are offered for sale. Cats, dogs or other animals shall not be allowed on shelves or counters or other places where food products are kept or stored. Meats shall not be exposed for sale outside the places of business unless protected from dust and insects by suitable covering.

DRUG STORES.

Inspectors of drug stores shall be guided by the following conditions: Sanitary conditions shall exist in drug stores: When the floors are clean and free from litter and accumulated dirt; when the side walls and ceilings are free from cobwebs, dust and accumulated dirt; when the counters, shelves, drawers and bins are clean; when refrigerators and soda fountains are free from foul and unpleasant odors, mold and slime. Glassware, spoons, etc., used at soda fountains shall be thoroughly washed and rinsed in clean water. Soda fountains, sirup cans and bottles shall be thoroughly washed before refilling. Draft tubes shall be kept clean. Drainage boards, sinks, shelves, etc., on which glasses are kept shall be kept clean. Graduates, mortars and other apparatus and glassware used in preparing drugs shall be clean. Prescription bottles must be washed and cleaned before filling. Powder papers shall be made of clean paper. Backshops and basements must be kept clean, well ventilated and lighted, or if used for storerooms only, must be dry, free from litter and suitable for the storage of medicinal preparations. Persons suffering from cancer or any contagious or infectious disease or who have been exposed to a quarantinable disease shall not be employed in a drug store.

HOTELS AND RESTAURANTS.

Inspectors of hotels and restaurants shall be governed by the following conditions:

Sanitary conditions shall exist in hotel and restaurant kitchens and dining rooms, ice cream parlors, lunch carts and other places where food is prepared and served, and when the floors are clean and free from litter and accumulated dirt; when the side-walls and ceiling are free from cobwebs and accumulated dirt; when the counters, tables, shelves and sinks, drawers, bins and cabinets are clean; when refrigerators, iceboxes and cold storage rooms are free from foul and unpleasant odors, mold and slime; when the doors and windows are properly screened; when dining rooms and kitchens are well lighted and ventilated. Dishes, tableware and kitchen utensils must be washed and rinsed in clean water after using; food served to customers and then returned to the kitchen or serving room must not again be served; all garbage must be removed daily. Back shops, backyards and cellars must be kept clean and free from rubbish. Cellars, unless properly arranged, well lighted and ventilated, and free

from moisture, must not be used for the storage of prepared foods unless such food is in glass, tin or other air-tight container. Spittoons must not be used in the dining room or other places where food is served. Toilets for employes shall not be located in rooms used for preparing or for storing food. Persons suffering from cancer or any contagious or infectious disease or who have been exposed to a quarantinable disease shall not be employed in any restaurant, hotel or other place where food is served.

Ordered, Ten thousand copies of the above rules ordered printed in pamphlet form.

EMPLOYES AND SALARIES.

The annual salaries of certain employes were ordered as follows, to begin April 1, 1907:

Superintendent of bacteriological laboratory	\$1,800 00
First assistant bacteriologist	1,400 00
Second assistant bacteriologist	720 00
Stenographer	600 00
Steward	600 00
First assistant chemist	1,400 00
Second assistant chemist	900 00
Third assistant chemist	600 00
Stenographer	600 00
Janitor	520 00

FOOD AND DRUG INSPECTORS.

Inspector No. 1, for central district	\$1,200 00
Inspector No. 2, headquarters Peru	1,000 00
Inspector No. 3, headquarters Worthington	1,000 00
Inspector No. 4, headquarters Paoli	1,000 00

The following persons were appointed to positions:

- Ivy L. Miller, second assistant chemist.
- Berthold Cohn, inspector No. 1.
- Frank Tucker, inspector No. 2.
- John Owens, inspector No. 3.
- A. W. Bruner, inspector No. 4.

Report of Dr. A. W. Brayton was read and ordered made of record.

REPORT OF DR. A. W. BRAYTON, IN REGARD TO THE CONDITIONS PERTAINING TO SMALLPOX, IN THE MONTHS OF NOVEMBER AND DECEMBER, IN PULASKI AND FULTON COUNTIES, MARCH 1, 1907.

By authorization of Dr. W. N. Wishard, acting President State Board of Health, I visited Pulaski and Fulton Counties, November 28 and 29, 1906, to investigate the smallpox in these two counties. This was made

necessary by a petition from DeLong, Indiana, signed by some forty residents of both Pulaski and Fulton counties, living in the vicinity of Leiters Ford, DeLong and Monterey, stating that there was much smallpox there, and that it was neglected by the health officers of both counties.

I left Indianapolis on the morning of November 28th and spent the afternoon and evening with the health officer of Fulton County, at Rochester, Dr. J. N. Rannells. From him I learned that while there were several cases of smallpox in the northwest corner of Fulton County, there were none in the vicinity of Rochester, and the disease was mainly in the country between Leiters Ford and the county line, and was under the care of the local health officer, Dr. Benjamin F. Overmyer, of Leiters Ford.

The following morning, November 29th, I took the train to Leiters Ford, meeting Dr. Overmyer about nine o'clock, but found only one family known to have the disease in that vicinity. We drove twelve to fifteen miles over the country, finding some eight or ten cases at five different farm houses. In every case the houses were quarantined and sanitary conditions were excellent, and the people were in full sympathy with Dr. Overmyer in his efforts to stamp out the disease. Dr. Overmyer carried vaccine with him and vaccinated wherever he found those that required it.

Dr. Clement L. Slonaker, near Leiters Ford, a graduate of I. M. C. in 1903, was also very efficient in vaccinating and combating the disease. He was thoroughly familiar with smallpox through your teachings and of the method of controlling it, and sent his regards to you.

None of the cases that we found were in any danger, except a mother, who was very thickly broken out, and a newborn babe three days old. I learned since, by correspondence, that the babe had a severe attack of smallpox, but survived.

We drove out to Monterey, in Pulaski County, arriving at noon, and immediately called upon Dr. W. E. Kelsey, aged about seventy-five, and his son, Arthur James Kelsey, the only practicing physicians in Monterey. They admitted that there were one or two cases that they knew of in the town. Dr. A. J. Kelsey, the son, stated that he had made some sixty vaccinations and that none of them had taken. His father was in doubt as to its being true smallpox, regarding it as a hybrid between chickenpox and smallpox proper. He talked fluently about the hybridization of disease, supporting it by his old army surgeon notions of the modification of typhoid by malaria, and the acceptance of that type of a disease known as typho-malaria fever.

After dinner we visited the town health officer, Dr. P. L. Hoot, who is not practicing at the present time, and who is a son-in-law of Dr. Kelsey, Sr. He thought there might be several recovered cases in the village, and had heard of one case that was recently broken out. Then, in company with Dr. Hoot, Dr. Kelsey and Dr. Overmyer, I made a canvass of the town. In a barber shop I discovered two cases that were recovering, with marks and scabs still on them. School was not in session, but I saw two boys on the street who had suffered from the prevalent disease. I learned from them that no attention was paid to it in the school, and that

as soon as they got over the fever and premonitory symptoms they went on to school just as they would had it been chickenpox.

We visited several houses—eight or ten—where it was reported that there was or had been some eruptive disease, and found ten or twelve cases in different mild stages of the disease. The general feeling was that of indifference, engendered by the statements of the physicians that it was not at all true smallpox, and that if it were they might as well have this disease as to undergo the effect of vaccination. Dr. Kelsey, Sr., in a more communicative mood in the afternoon, told me that he presumed there had been three or four hundred cases in the village and surrounding country. This may have been an exaggeration.

I should have stated earlier that from Rochester, the night before, I had communicated with the county health officer of Pulaski County, Dr. John J. Thomas, who stated that there were a few cases in Winamac, but that he did not know personally of any in Monterey, as they had not been reported to him. It was impossible for me to get to Monterey in time to go over the town with Dr. Overmyer.

I urged upon Dr. Kelsey—who with the son-in-law are the parties who should have prevented the wide spread of the disease—the necessity of getting good virus and having immediate general vaccination at the expense of the town, and told the health officer that wherever he heard of a suspected case he should immediately order one of the physicians to investigate and report the facts to the county health officer.

Inasmuch as the holidays were approaching, and in that region there is a good deal of visiting back and forth from town to town and even interstate visitation, I attempted to impress upon them the necessity of keeping their people at home, as a case had already gone to Lafayette from Monterey, who had developed the disease while working in a laundry there. I also threatened the town with quarantine, telling them that if we did not hear of immediate efforts to suppress the disease, you would take steps to prevent any egress from the town and might order the mail fumigated. I do not think that my threats made much impression upon them. They all seemed content to take their chances and wallow in the disease.

Smallpox first came to that region in March, from Fort Wayne, and had been transmitted from case to case in the country and Monterey from that time. I urged upon Dr. Overmyer the importance of keeping in touch with the town of Monterey and keep me informed as to the conditions. I received a letter from him a month later, stating that he believed it had improved, and that there had been no further outbreak in Fulton County.

I returned to Rochester at 5 o'clock in the afternoon, and talked with Dr. Thomas by long distance 'phone, acquainting him with what I had found and urging him to go at once to Monterey to take proper measures to put an end to the smallpox. I received a letter from him stating that he made such a visit and admitting that he found the conditions much as I had described. I enclose his letter. I also enclose the petition from DeLong asking for the aid of the State Board of Health.

In all the visits I have made at your request to the different parts

of Indiana, I never found any locality, except possibly Clay City, where there was such absolute indifference to the disease and to the rules of the State Board of Health. No citizen was sufficiently interested to prosecute the doctors for not reporting. Dr. Hoot is secretary of the town board, and by virtue of his office, acts also as secretary of the health board, the town and health board being the same.

I visited the newspaper office and saw the editor, and he assured me that the paper had used its influence to assist the State Board of Health, publishing matter sent them and urging the people to be vaccinated. Of course, it was difficult for Dr. Thomas at Winamac to reach and control such a condition, but I think that more frequent visitations and more determination on his part would have brought the physicians and town board of Monterey into line with the rules of the health board.

I visited several physicians at Rochester, and found everything all right there. Dr. Rannells is an unusually efficient and systematic health officer. They have a non-state college at Rochester, which has twice been jeopardized by the presence of smallpox in Fulton County and in Rochester, and as they are all much interested in the college and town, they are very bitter against the people of Monterey for not making an effort to destroy the disease. They do not care for the trade of these people, and are constantly urging them to stay on their own side of the county line. Dr. Rannells said that two or three cases of smallpox in Rochester would upset the school and derange the town and he is determined not to have it occur.

REPORT OF DR. A. W. BRAYTON UPON THE CONDITION OF SMALLPOX IN PERU, WITH SPECIAL REFERENCE TO THE ARREST AND TRIAL AND CONVICTION OF DR. JACOB O. MALSBURY FOR NOT REPORTING SMALLPOX TO THE CITY HEALTH OFFICER, MARCH 12, 1907.

On December 2, 1906, I went to Peru, Indiana, by authority of the State Board of Health, to determine the nature of a case of eruptive disease, which proved to be smallpox. The details are as follows:

The patient, a young man of twenty-five years, had visited the office of Dr. Jacob O. Malsbury, with what proved to be prodromal symptoms of smallpox, a week previous. Dr. Malsbury prescribed for him, and two days later was called to the young man's boarding house and prescribed for him again, and also the day following. On the fifth day the patient appeared at Dr. Malsbury's office about 2 o'clock in the afternoon, and the patient related to me that Dr. Malsbury said that this was what some of the physicians of the city were calling smallpox, and that he had better go to see one of the health officers. The man walked about the streets of the town during the afternoon, took supper at his boarding house, and in the evening about 8 o'clock called upon the health officer, Dr. L. O. Malsbury, a brother of J. O. Malsbury, who decided the case to be smallpox. Dr. J. O. Malsbury did not report the case to the health officer.

Inasmuch as Dr. J. O. Malsbury had been carding the papers against vaccination, saying that if this were smallpox, it was no worse than vaccination, etc., Health Officer Malsbury applied for assistance from the

State Board, as he was determined to prosecute Dr. J. O. Malsbury and have him arrested and fined.

On visiting the boarding house with Health Officer Malsbury, we found the man well broken out with smallpox. Several of the boarders had escaped. The householder was intoxicated and vicious, but the smallpox warning was nailed upon the house and the unvaccinated inmates were vaccinated.

I saw several of the leading physicians, Drs. Bloomfield, Helm, Griswold, etc., who were very insistent on having Dr. J. O. Malsbury punished, as his actions and newspaper notes made it difficult to suppress the smallpox in Peru, which was allowed to have a wide spread because of the failure of Dr. Armstrong to report cases said to be smallpox to the Health Board. You will recall that Dr. Armstrong was fined \$10.00 and costs.

I visited several houses with Health Officer Malsbury, and found the smallpox under very good control. I went before the mayor of Peru and made a statement to him of the action of Dr. J. O. Malsbury, and urged his immediate arrest and trial, and saw that a police officer swore out a warrant to be served the next day. The trial was postponed until February 8, 1907.

In the meantime I was called to Peru to meet the county commissioners and urge upon them the importance of continuing Dr. J. B. Higgins as county health officer, at the usual salary of \$400, although a homeopath who was opposing vaccination—believing that the swallowing of the vaccine would do as well as proper vaccination—had offered to be county health officer at \$100 a year. I advised with the commissioners for three-quarters of an hour and answered all their questions, and had the assurance of two of them that they would vote in favor of Dr. Higgins, and did not wish to have a health officer who did not believe in vaccination at any price. The result was that Dr. Higgins was elected as county health officer at the former salary.

On the same day, I again urged upon the mayor the importance of bringing Dr. J. O. Malsbury to trial, which was done, with the result that he was fined \$10.00 and costs, after a trial that lasted all day, in a justice's court, and was attended by a throng of citizens. The arrest and fining of such an ignoramus as Dr. Armstrong, and of so intelligent a quack as Dr. J. O. Malsbury, proved the turning point in the control of the smallpox in Peru. After these actions, physicians were prompt in reporting all cases of eruptive diseases to the city or county health officers.

I think that Health Officer L. O. Malsbury and Dr. J. B. Higgins are to be commended for the excellent work they are doing in Peru, and in Miami County, respectively, and that the State Board has done no better work than to assist them in the diagnosis and in the two successful prosecutions.

Second Regular Meeting.

REGULAR QUARTERLY MEETING OF THE STATE BOARD OF HEALTH.

April 10, 1907.

AFFAIRS CONSIDERED OF THE FISCAL QUARTER ENDING JANUARY 31, 1907, AND CALENDAR QUARTER ENDING MARCH 31, 1907.

Called to order by President Davis at 2 p. m. Present: Drs. Davis, McCoy, Tucker, Wishard, Hurty.

Minutes of the regular meeting held January 11, 1907, and the special meeting held March 15, 1907, read and approved.

REPORT OF SECRETARY FOR CALENDAR QUARTER ENDING MARCH 31, 1907.

The Sixty-fifth General Assembly, which adjourned March 10th, passed two new laws relating to the public health directly, and one law concerning Pure Foods and Drugs. The most important is the Statistical Law. This law requires the immediate reporting of deaths and contagious diseases, and requires that births be reported within twenty days. The penalty for disposing of a dead body in any way without first securing a permit is a fine of not less than ten nor more than one hundred dollars, and in addition, the coroner of the county shall disinter the remains and hold an inquest. The penalty for failure to report contagious diseases is a fine of not less than ten nor more than one hundred dollars, and the same penalty also applies for failure to report births. It is to be regretted that the legislature deemed it wise to place twenty days as the limit of time for reporting births. There is no reason why they should not be immediately reported. This extension of time will, in a degree, invalidate the law as it relates to births.

The next law of importance is termed "The Free Antitoxin Law." This act provides that any physician may secure free antitoxin by filling out a blank furnished by the State Board of Health, and presenting the same to any dealer in antitoxin. The said blank, when properly and completely filled out, as required, is a claim against city, town or county, as the case may be, in which it has been found necessary to purchase the antitoxin. A heavy fine and imprisonment is provided if the law is abused for personal gain.

It is also provided that only people too poor to buy antitoxin shall be supplied.

The third law in importance is the Pure Food and Drug Law. This law is now quite perfect. It is built upon the same principle as the national law and the enforcement is given to the State Board of Health. The appropriation for enforcement is fifteen thousand dollars per annum. One feature of this law which deserves special mention, in this brief abstract, is the clause which pertains to the proper slaughtering of animals for human food. The said section makes it unlawful to sell within this state, for human food, the carcass or parts of carcasses of any animal which has been slaughtered, prepared, handled or kept under unsanitary conditions.

“Unsanitary conditions,” says the law, “shall be deemed to exist wherever and whenever any one or more of the following conditions appear or are found, to wit: If the slaughter-house is dilapidated and in a state of decay; if the floors or side walls are soaked with decaying blood or other animal matter; if efficient fly screens are not provided; if the drainage of the slaughter-house or slaughter-house yard is not efficient; if maggots or filthy pools or hog wallows exist in the slaughter-house yard or under the slaughter-house; if the water supply used in connection with the cleansing or preparing is not pure and unpolluted; if hogs are kept in the slaughter-house yard or fed therein on animal offal, or if the odors of putrefaction plainly exist therein; if carcasses or parts of carcasses are transported from place to place when not covered with clean white cloths, or if kept in unclean, bad smelling refrigerators, or if kept in unclean or bad smelling cold storage rooms.”

The penalty is summary, for it is made the duty of the peace and all health officers to seize any animal carcass, or parts of carcasses of any domestic or wild fowl, eggs, game or fish, found to be unwholesome, and which have been slaughtered or prepared, handled or kept in unsanitary conditions, as defined in the law. Upon seizure, the officer shall deliver the same to the nearest police judge, or justice of the peace, together with all information obtained, and said police judge or said justice of the peace shall issue warrants of arrest for all persons believed to have violated the provisions of the law and said case shall be tried at an early date thereafter. Any person found guilty of violating any of the provisions of this section shall be fined not less than ten nor more than one hundred dollars for each offense and the meat in question shall be drenched with kerosene oil or rendered into grease in tankage as the court may direct.

HEALTH OF THE STATE DURING THE QUARTER.

It seems that the public health during the quarter was not quite as good as in the corresponding quarter last year. Grippe, typhoid fever and measles prevailed unusually. The deaths ran higher than in the same period last year. The following tables show the conditions in actual figures in regard to smallpox and typhoid fever:

SMALLPOX COMPARISON FOR FIRST CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
January, 1906.....	80	.....	10
January, 1907.....	232	3	15
February, 1906.....	152	.....	15
February, 1907.....	241	.....	25
March, 1906.....	124	.....	16
March, 1907.....	221	.....	20
Total, 1906.....	356	.....	41
Total, 1907.....	694	4	60

TYPHOID FEVER COMPARISON FOR FIRST CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
January, 1906.....	175	33	52
January, 1907.....	688	65	50
February, 1906.....	117	29	38
February, 1907.....	312	46	45
March, 1906.....	258	37	46
March, 1907.....	304	40	33
Total, 1906.....	550	99	136
Total, 1907.....	1,302	151	128

VISITS BY THE SECRETARY.

January 4th, Seymour.—On this date the secretary visited Seymour, in order to deliver an address before the Jackson County Farmers' Institute. The subject was "Prevention and Cure of Tuberculosis," and was illustrated by lantern pictures. The audience overflowed the public hall that was provided and it was said that a hundred or more were turned away. The lecture was well received, a vote of thanks was given and also resolutions of commendation for the State Board of Health and its work were passed.

January 8th, Noblesville.—On this date the secretary visited Noblesville, in order to confer with the authorities in regard to an outbreak of "winter cholera." This city, almost every year, has an outbreak of diarrhoeal disease, when the ice breaks up in the

river. It is the theory that poisons form under the ice from decomposition of the sewage from the cities above, and the tubular wells supplying the city with water, and which are driven in the bottom of the river, are more or less injured by the broken ice, and this lets the poisoned water into the public supply. It was estimated that 500 cases of so-called "winter cholera" occurred and subsequently a light epidemic of typhoid fever appeared. The old advice was given, that precautions should be taken by protecting the tops of the wells in the river with masonry or sealed crib-work in order to keep back the ice which so frequently causes the well tubes to leak when it breaks up. This would be the cheapest remedy, but it would be far better if Noblesville would drive new wells above high-water mark, so that tubes would never be subjugated to the breaking influence of floating ice.

January 12th, Terre Haute.—Upon invitation of the city health officer, the secretary visited Terre Haute in order to confer with the council in regard to the public water supply. A mild epidemic of typhoid fever had appeared and analyses of the public supply were made by a local chemist. His report was adverse to the water furnished by the Waterworks Company. As his results of analyses were opposed to those of the State Laboratory, a conference seemed necessary. A survey of the situation developed the fact that, with the exception of one case, all the typhoid reported occurred in persons who did not drink the city water supply. This fact, together with the results of the investigation of the State Board of Health, led to the conclusion that the public supply was good and probably not to blame for the epidemic.

January 22d, Hammond.—Upon invitation of the Hammond Ladies' Civic League, and the city Board of Health, I visited Hammond, to confer with the authorities named, and to deliver the usual lecture upon "The Prevention and Cure of Tuberculosis." In the forenoon of my arrival, I made a talk to the high school upon "Personal Hygiene;" in the afternoon I made a talk to the teachers upon "School Hygiene," and in the evening, in the opera house, delivered a lecture to a large audience assembled in the same. As said, the lecture delivered was the usual one upon "Tuberculosis, Its Prevention and Cure." The lecture was illustrated. The audience passed resolutions commending the work of the State Board of Health, and also of thanks for the lecture. All the papers gave most favorable notices, and the secretary believes much good resulted from the visit.

February 10th, Covington.—In response to an invitation issued by the Women's Improvement Society, and the county and city health officers, I visited Covington, in order to deliver the usual lecture, entitled "Tuberculosis, Its Prevention and Cure." The audience room was filled to overflowing, and it was said that one hundred and more were turned away. The lecture was well received and the usual resolutions were passed. It certainly is true that this visit was attended with good results.

February 25th, Vincennes.—Upon request of the Local Women's Aid Society, and the city Board of Health, I visited Vincennes, in order to make sanitary inspection and advise the societies interested as to what could be done to better the sanitary conditions of the city. Another object of the visit was to deliver the usual illustrated lecture upon "Tuberculosis, Its Prevention and Cure." Upon arrival, together with the city and county health officers, an extended sanitary survey of the city was made. The greatest need to Vincennes is a comprehensive and efficient sewer system. The ground pertaining to this subject was thoroughly gone over with the parties interested, and they, in turn, would present the matter to the city council. The lecture in the evening was well attended and seemed to be thoroughly appreciated. The usual resolutions of thanks and confidence in the State Board of Health were passed.

March 5th, Peru.—On this date I visited Peru on account of smallpox, and also to confer with the county secretary and city health officer in regard to a prosecution for failure to report smallpox. Six cases of disputed smallpox were visited and all were discovered to be true smallpox. The prosecuting attorney was consulted in regard to the prosecution of the offending physician, who failed to report cases of smallpox, and as a result, he promised to push prosecution. Within ten days after this visit, the non-reporting physician was fined ten dollars and costs, the total sum amounting to \$92. This has had an excellent effect upon the non-reporting physicians of Peru and Miami County, for we are now informed that reports come in promptly and all physicians seem eager to obey the law.

March 12th, Peru.—On this date I visited Peru again in order to deliver a lecture upon "Personal Hygiene" at the Peru Young Men's Christian Association. Although the night was very rainy, and heavy thunder showers prevailed, still a large audience gathered in the assembly room of the Association. My address was well received and the usual resolutions of thanks and confidence in the State Board of Health were passed.

March 18th, Coatesville.—In accordance with an invitation of the local health officer and the city health officer, I visited Coatesville, in order to make sanitary survey of the schoolhouse. Said sanitary survey is presented herewith for action by the Board.

March 19th, Goshen.—On invitation of the Civic League and the city Health Board, I visited Goshen to advise in regard to the management of smallpox, and also to deliver the usual illustrated lecture upon "Tuberculosis, Its Prevention and Cure." The smallpox situation was very simple, only one physician declaring that the disease did not exist. He was quickly convinced, and promised to report the cases thereafter. The city council was urged to provide free vaccination, and this was done. The lecture was well attended and seemed to have made an impression, for several citizens arose in the audience, expressing gratification and offering thanks. The assemblage also passed resolutions of thanks.

March 26th, Greensfork.—Upon petition of citizens of Greensfork, I visited this town, in order to make a sanitary inspection of the schoolhouse. Report of said inspection is presented at this meeting for the Board's action.

March 30th, Edwards.—Upon petition from patrons, I visited Edwards, Johnson County, to inspect the schoolhouse at that point. A number of patrons were gathered at the schoolhouse upon arrival, which gave me an opportunity to explain and make plain the unsanitary conditions that existed. Full report of this visit is prepared for presentation for action of this Board.

April 2d, Greentown.—In accordance with a petition of the patrons of the school and urged by the Superintendent of Public Instruction, I visited Greentown to inspect the public school building. The county health officer accompanied me from Kokomo, and we, together with the city health officer, made the inspection. The schoolhouse was found old, dilapidated and unsanitary. A full report is presented to this meeting for Board action.

April 7th, Bath Township, Franklin County.—In accordance with petition from patrons, I visited Bath Township, Franklin County, in order to inspect four one-room schoolhouses, all of which were believed to be unsanitary. A full written report of these inspections is prepared for presentation to this Board for action.

SMALLPOX AT LAFAYETTE.

By A. W. Brayton, M. D.

According to request, I went to Lafayette to investigate smallpox, March 22d, arriving at 2 o'clock. Was met by Dr. Bitting and went at once to President Stone's office and conferred with him. Dr. Bitting stated that there were some four or five cases of variola among the students and that a considerable number had been exposed, but the eruption was observed in one or two of the cases. However, it is believed that less than 5 per cent. of the student body is not vaccinated, and inasmuch as President Stone issued a special order the day before, to be published in the *Purdue Exponent*, and made known to all the students, stating that those who had not been vaccinated within the last five years should be vaccinated at once, upon penalty of expulsion from the University, it is quite likely that by Monday all of the unvaccinated students will be vaccinated.

There is an epidemic of mumps in the University that is causing considerable sickness and interfering with the classes. The students are perfectly willing to be vaccinated and so are the people in whose houses they reside.

Dr. Bitting and I then called upon Dr. Moffett, health officer of West Lafayette, and examined the contagious disease returns of smallpox. One case is now well of smallpox. He escaped observation, was but moderately broken out and was not in the Detention Hospital.

Case 2, M. G. Hollowell, has been in the Detention Hospital two weeks, sent there by Dr. Moffett.

Case 3, W. R. Proctor, in the family of John Cromer, West Lafayette, diagnosed by Dr. Bitting and put in hospital.

Case 4, W. W. Kellmas, 108 Waldron street, West Lafayette, diagnosed by Dr. Bitting, and taken by him to the Detention Hospital March 18th.

Case 5, L. J. Smith, student, eruption March 18th, diagnosed by Dr. Moffett and taken to the Detention Hospital.

I visited these patients in the Detention Hospital at 4 o'clock and examined each one. The cases are undoubted smallpox of moderate type. There is also in the Detention Hospital a youth of 16 years, John Rogers, resident of Lafayette. He has been in the hospital two weeks. The physician in charge of the hospital is Dr. Youkey. The student said that the food was good, that the attention was sufficient and that they were comfortable. The sanitary condition of the hospital as regards heat, light, ventilation, bath-room, etc., is good. There is no trained nurse, however, the hospital superintendent and his wife doing whatever ward work is required and preparing the food for the five male patients.

In company with Dr. Bitting I visited Dr. J. D. Hillis, city health officer of Lafayette, and from him got a detailed history of the eighteen or twenty cases of smallpox that have been in Lafayette this winter. It was imported January 1st by two gypsy fortune tellers, who went from theater to theater and other public places telling fortunes. Therefore, the eighteen cases occurred in several different localities. Dr. Hillis had the entire history of each case in mind and evidently had paid much attention to tracing the sources, to fumigating the houses and public buildings where patients had been and in sending them promptly to the Detention Hospital.

The support of this hospital comes from three sources: A, the County; B, the city of Lafayette; and C, the city of West Lafayette. The health officers of each of these civic divisions are empowered to send cases to the Detention Hospital at their discretion.

Dr. Moffet has empowered Dr. Bitting as deputy health officer, permitting him to identify any cases that occur in the University, and if satisfied that they are smallpox, to take them personally to the Detention Hospital. Dr. Hillis stated that the medical care given by Dr. Youkey was sufficient, and that it was not necessary for Dr. Bitting to attend as physician any of the patients from the University in the Detention Hospital, but that he had no objection, under proper precautions, to Dr. Bitting's visiting the Detention Hospital for scientific purposes.

I found Dr. Hillis very courteous, very efficient and evidently the master of the situation. He is thoroughly conversant with the individual cases and numerous details.

After visiting the Detention Hospital I returned to the University and reported to Prof. Stone, assuring him that the disease was being efficiently handled, that the condition of the patients in the Detention Hospital was satisfactory, and that with the enforcement of vaccination, according to his order, I thought that but few other cases, if any, would develop among the students.

At 6 o'clock in the evening, I visited the Indiana State Soldiers' Home, spending an hour with Prof. Birges at the University, who is lecturing to the Nurses' School of thirteen students upon "Ventilation." I also visited Dr. Cunningham, physician in charge, and his assistant, Dr. Mayfield, both former students of yours in the Indiana Medical College, and who desired to be remembered to you.

From all that I could see in the visit of two hours in the evening and after dark, going through the wards of the hospital, I am satisfied that the sanitary conditions are good and that the medical officers are efficient and will use every means to prevent the spread of smallpox to that institution. With all three of the health officers, the local physicians and the doctors of the University working in unison, with a suitable Detention Hospital, to which patients are promptly sent, and with the coming of spring, I think that there will be no extension or long-contending duration of smallpox in the hospital in Lafayette or in the surrounding region.

I left Lafayette on a late train, reaching the city before midnight of the same day.

CONSIDERATION OF SANITARY SURVEYS OF SCHOOLHOUSES.

The following reports of inspections of schoolhouses were duly considered and action taken:

SANITARY SURVEY OF SCHOOLHOUSE AT COATESVILLE, IND.

On account of petition of patrons, the secretary, on March 18, 1907, made a sanitary inspection of the schoolhouse at Coatesville, Clay Township, Hendricks County.

Site.—The only method of approach to the school building is through

two muddy alleys, both of which contain one or more manure piles. There are no sidewalks of any kind. The children are compelled to walk to the schoolhouse through these dirty alleys.

The ground upon which the schoolhouse is situated is low and damp, affording no place where children can play and exercise, except when the ground is frozen or except in very dry weather. The surroundings of the schoolhouse are not at all pleasant, the site not being good in any respect.

The Building.—The building is a two-story brick. No basement. Walls cracked in various places. Down-spouts broken and leaking at corners. Brick foundation. Built in 1881. Four rooms, two below and two above. There is a vestibule two stories high, and in said vestibule is placed the stairway for reaching the upper story. This stairway has, in all, twenty-five steps and two turns. The banisters are broken. If the building were to catch on fire when school was in session, there would certainly be a great loss of life in this narrow stairway, which has two turns. The floors throughout the building are worn. Plaster off in halls and in primary room. The rooms are heated by stoves; no ventilating ducts. The rooms are lighted from three sides. The lower rooms are always damp in wet weather.

Health of Pupils.—The teachers in every room reported not a little sickness. They all testified to the continued existence of colds, and in every room this winter there has appeared scarlet fever, measles and sore throat. In the first primary many children had sore eyes, and, as reported by the teacher, there had been considerable sickness.

Recommendations.—This schoolhouse is unsanitary, is built on an objectionable site, has an abominable approach, and is in every way a disgrace. As the testimony shows, sickness prevails the year round, and the better class of people are in favor of erecting a new building. However, an examination of the financial condition of the community shows that this year only \$7,000 is available for putting up a new structure. It is, therefore, proposed by the citizens who desire a new building that another year be allowed to pass by so this sum will double itself and be available two years hence.

I therefore recommend that this schoolhouse be condemned, and that the condemnation be made to take effect May 1, 1908.

After consideration, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10, 1907, that the schoolhouse at Coatesville, Hendricks County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT FOREST, IND.

It is found:

First.—That part of the children have to go through an alley which is very dirty, and in a wet season they claim it has mud shoe-top deep. There is a barn on this alley from which all the dirt is thrown direct into the alley and not into a box.

Second.—Whenever it rains the water stands in large puddles entirely in front of the schoolhouse and part of the front yard. The north part of the yard looks like a small lake, and it takes this water from three (3) to four (4) days to soak in.

Third.—At the last rain, about a week ago, the water stood about eight (8) inches deep in the basement of said school building. It has been claimed by some of the citizens to be much higher than eight inches in the past when they have heavy rains.

Fourth.—The basement walls, March 21st, were very damp. The basement floors over the entire building were wet.

Fifth.—The dry closets have practically no ventilation at all. There is a stack heater, but there are no vault heaters nor vault flues, and when the water runs in the basement, as it did the other day, it washes contents of closets out into the basement. There is no way of burning the closets out, as there should be in all first-class dry closets, there being no vault heaters. The janitor says that it takes a day to burn the closets out, and it shows it from the way the door and ceiling of this closet has been charred.

Sixth.—Under the furnaces in the cold air duct which supplies the rooms, the water was about six inches deep and it had been there for several weeks.

Seventh.—While we were there, March 21st, the odors from the basement closets permeated the entire building. Just last Friday, March 15th, the janitor fumigated the house with formaldehyde which he claims has to be done every day.

Eighth.—The front entrance is badly cracked, and in some places you can run your hand between the brick work, caused by settlement and weather. The foundation is made with Kokomo limestone, which slacks and disintegrates when exposed to the weather. You can go along and chip this stone in many places. The foundation and basement walls are cracked in several places, and the area around the cellar windows is full of rubbish and filth.

Ninth.—The walls on the first story are very damp and the paper is falling off in the room that is papered.

Tenth.—You can smell the gas and fumes from the furnace in all the rooms, and the teachers claim it is impossible to heat the rooms to a uniform temperature. In the southeast room it is impossible to heat the floors. The northeast room is too hot on the inside with no circulation of air on the north side of room. It takes on an average of one hundred and thirty (130) tons of coal a season to heat this building, and then it is not satisfactory.

Eleventh.—The walls of the first and second floor are cracked, due partly from settlement and partly from poor brick work, in several places, especially over the windows.

Twelfth.—The roof, which is of slate, has sagged in many places, and on examining the plates upon which the rafters rest I find that they are tipped up on the inside, showing there is an outward thrust from the roof rafters. I also found that the rafters have sagged several places from two (2) to four (4) inches and around the chimney have entirely pulled away.

Thirteenth.—When it was originally built it was braced with seven-eighths ($\frac{7}{8}$) inch stuff to the ceiling joist. In the majority of cases these seven-eighth-inch boards have a bow of about four (4) inches. The slate, so far as I can see, is in good condition, with these exceptions.

Fourteenth.—The stairways are four (4) feet six (6) inches wide, with winders at each landing from basement to second floor. The stairs are in some places very weak, especially at the first winders from the second floor.

Fifteenth.—In the primary room they have forty (40) pupils; in the other room on the first floor they have fifty-seven (57) pupils; in the high school on the second floor they have about thirty-five (35) pupils, and the desks are arranged diagonally across the room so as to get the light over both the right and left shoulders. In the other room on the second floor they have fifty-three (53) pupils. This room is kept entirely too hot; the teacher informs me that if the other rooms are kept warm, his room is that way all the time.

Sixteenth.—They have a six-inch tile from the building to a tile ditch, which is located about a quarter of a mile from said building.

Seventeenth.—It is claimed by the citizens and physicians attending the following pupils that their death was caused indirectly from this schoolhouse: Olive Jenty, and Merle Shoemaker, who were attended by Dr. Hornaday; Blanche Stockburger and Lillian Dunbar, who were attended by Dr. Suhrey; also Mable Blair, who was attended by Dr. Cooper.

Eighteenth.—The trustee, five of the citizens, and one of the advisory board, accompanied me to the building. We were in the building perhaps two hours, and when we came out every man claimed to have a headache. I cannot say in regard to the others, but my headache was extremely severe, and I do not see how the children stand it to stay in these rooms day after day. I noticed that there was not a real rosy-cheeked pupil in the school building.

The ceiling height in the basement is eight (8) feet, with about three (3) feet above grade. The first and second stories are twelve (12) feet, eight (8) inches. The attic is open through the tower, in which pigeons and birds have their nests, and it is a very filthy place.

After due consideration of this report, the following order and proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the schoolhouse at Forest, Clinton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustee, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT COLFAX, INDIANA, APRIL 4, 1907.

Site.—The site is high, rolling, probably eight trees on it. Driven well in the southwest corner of the yard. The ground comprises about one acre of land, rolling, clay soil, and subsoil. The building is situated 90 feet south of the Vandalia Railroad and 400 feet southwest of the Big Four road. It is approached by cement walks in street and a board walk from the street to the door. There are no walks on the ground and no outbuildings.

Building.—The building is a two-story brick; was built in two parts, the main part, in 1876, two stories, 50x50 feet. An addition was built to the south end of that in 1882, two stories, 25x30 feet. The roof is slate and tin.

Basement.—This was excavated after the addition was built and is entered from the south end of the addition. Comprises a room about 20x25x10 feet. There are three furnaces in this basement. The first is under the addition, round metal sheetiron, heating the addition. From that room, a passageway about four feet wide is dug out under south half of the main building, in which a furnace is located. Another passage is connected on to locate the third furnace under the north half of the main building. These furnaces are large, round and of heavy sheetiron. Each furnace is supposed to heat two rooms. There are no ventilators in the basement.

Hall.—The building faces the southwest. The hall is 11x48x14. There is a cloakroom at each end of the hall about four feet wide, and closets under the stairway. The stairway goes up at each end of the hall with a half turn at the top. They are about three feet wide, with a board banister, are pretty well worn, but seem in fair condition.

First Primary Room, Main Building.—Size 25x40x14 feet. Enrollment is 45; average attendance, 38. Lighted by three windows on the north and two on the east. Blackboards are of slate, good condition, seats fair. Heating by furnace, ventilated by windows. All windows in the building have wooden shutters. Floor is worn badly, but kept oiled and clean. There are two pillars in the center of the room supporting a joist under the ceiling which is necessary to stay the floor of the upper room.

Intermediate Room, Main Building.—Enrollment, 39. The size of this room is 25x40x14; average attendance, 35. Blackboards of slate, in good condition. Seats, fair condition. Heating, ventilation, windows, the same as the first room described. The floor is badly worn, with cracks between the boards and would have to be replaced if used another year. The drinking facilities in both rooms are tin buckets and tin cups. The light in both of these rooms is good.

Fourth Grade, Addition.—Enrollment is 30; attendance, 25. This

room is 23x28x14. Floor is badly worn and conditions as to light, heat, ventilation, etc., the same as the other rooms. This room opens both into a hall and to the outside next to the street. This hall that opens into the street is used as a cloakroom. It is about 5x10 feet.

Second Floor.—Seventh and eighth grade room. Its size is 25x40x14. Enrollment, 30; average attendance, 26. The blackboards in this room are painted on the plastering, on the east and south sides of the room. The conditions as to heat, ventilation, light, etc., are the same as in the lower rooms. The seats are comparatively new and in good condition. The paper on the walls and ceiling is badly smoked; in many places the paper is torn, showing the plastering to be badly cracked. Also marks as though the roof had been leaking and water had run down on the paper. The floor is worn. The cloak room consists of a partition set up in the east side of the room next to the door, with hooks on the wall and on the partition on which to hang their cloaks and hats.

Fifth and Sixth Grades.—They are in the addition. Size of this room is 23x28x14, and the condition as to walls, ventilation, floors, light, etc., is the same as the other rooms. The enrollment in this room is 25, average attendance, 23.

High School Room.—Main building. Size is 25x40x14. Enrollment, 40; average attendance, 37. Seats in this room are comparatively new and in good condition. The same conditions obtain as in the seventh and eighth grade rooms as to walls and ceiling, floors and ventilation. There is a small room partitioned off in the hall for a recitation room. This is about 10x20 feet.

Remarks.—This building is so close to the railroads that they are obliged to close the windows, without regard to heat or ventilation, during the greater part of the day, in order to hear the recitations, as the noise of the trains switching and changing around is so loud that it would be impossible to hear anyone talk while they are at work. The principal estimated that there was an hour a day lost in recitations on account of the noise, and through my own observation during twenty minutes when a freight train was switching around there today, I think that his estimate is very conservative, indeed. The principal also complains of the heating and ventilation. There is no means of ventilating any of the rooms except by windows and doors, and the heating facilities are such that at times it is almost impossible to heat the room sufficiently to allow the pupils to continue in school. He has not had to close the building on account of cold this winter, but has had to shift the pupils from one room to another on several occasions. The trustee, Mr. Bailey, reports that the insurance on the building has been canceled by the companies who had written the policies, on account of the bad risk of the building, and the trustee, and an ex-member of the Board, Mr. George Rhinehart, both gave it as their opinion that the building was unsafe, that during a heavy wind or storm, it would shake very perceptibly. Outside walls are cracked and in bad condition.

Recommendations.—I would respectfully recommend that the building be condemned as unsanitary, insufficiently heated, and the location is such that it is a loss and detriment to the township to have the building located on its present site. I would also suggest that in the condemnation and ordering of the erection of a new building, that an order be given that a

different site be chosen. There are two sites near the town, either of which would be very desirable for the location of the building, as there would be sufficient elevation for a basement and good drainage, plenty of room and absence of noise to attract the attention of the pupils.

After due consideration of the above report the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the schoolhouse at Colfax, Clinton County, Indiana, is old, dilapidated insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

SANITARY INSPECTION OF CENTER GROVE, WHITE RIVER TOWNSHIP, JOHNSON COUNTY, HIGH SCHOOL BUILDING.

Inspection made March 30, 1907.

Site.—Is situated on a hill, and is, indeed, beautiful in every respect. The ground has a clay sub-soil, gravel about ten feet below level. Drainage excellent.

Building.—Built about twenty-five years ago. Two-story brick. Stone foundation. No basement. Walls slightly sprung and slightly cracked. It was found necessary to pass iron rods through the building several years ago. There is a broad gravel play-ground in front, but no walks. The entrance is by a narrow vestibule, and a narrow winding stairway leads to the upper story. This stairway has two turns, is steep, $2\frac{1}{2}$ feet wide, has eighteen steps and is much worn. It makes one shudder to look at this stairway and contemplate what would happen if the house were to catch on fire when school was in session. Doubtless, many lives would be lost in this trap.

Interior.—Four rooms, two above, two below. The lower rooms are entered first, by outside door into vestibule, then by narrow door into the cloak room, and from thence by narrow door into schoolrooms. Three turns are necessary to enter the lower rooms. The cloakrooms are cold and damp.

Primary Room.—This is on the lower floor and on the north side of the building. It is $24 \times 28 \times 12$, giving space for forty children. Enrollment and average attendance not secured. There were thirty-eight desks in the room. Lighted by three windows, two on the north and one on the west. Windows very narrow and small, and although the day was very bright, this room was dark. There is much complaint on account of the darkness of

the rooms. Considerable sickness prevailed last winter. Coughs, colds, headaches, eyeache, were commonly complained of.

Second Room.—Is on the first floor and grades 4 and 8 taught therein. This room was badly crowded, and contained forty-five seats. Enrollment and average attendance not secured. Room is 24x28x12, and contains 8,064 cubic feet, furnishing cubic space for forty students. Lighted by two windows on the south and one on the west. Although the day was bright, this room was very dark and much complaint is made of this fact by the students. The diseases noticed were coughs, colds, headaches, eyeache.

High School.—This room and the recitation room occupies the entire upper story. High school room, 47x24x12, furnishing a cubic space of 13,536 cubic feet, which is room for sixty pupils. There were forty-six desks in this room. The room is lighted by five windows. Two of these windows are on the south and three on the west. Two of the three western windows are in vestibules which open out from the main room and furnish little light. The room was very dark, although the day was bright. Much complaint among students and patrons on account of the darkness of this room. At one time the high-school room occupied the entire upper floor, but a partition has been thrown across the entrance end, in this way making a room 24x10. This room is lighted by three windows, two on the north and one on the west. There is a large glass window in the partition. This arrangement lessens the amount of light in the high-school room.

The outhouses are frame, in bad condition, at some distance from the building, with no walks leading thereto. In the yard is a long, low horse-shed, with thirty-two stalls. This shed was very foul with manure. The water supply is from a dug well 35 feet deep, and the water has a peculiar ground taste. Only a few pupils will drink it, most of them visiting a farmhouse nearby for drinking water.

Summary.—This is a miserable schoolhouse. The vestibule is a veritable fire trap, and the people should offer thanks, that inasmuch as the building has never caught on fire, therefore, lives have not been lost by crowding the narrow, steep, winding stairway. It is insufficiently lighted, producing eye strain and headaches. It is heated by stoves, which, of course, is always wrong, and ventilation is solely by windows and doors. The walls are cracked and the whole building is damp.

Recommendations.—I recommend that this schoolhouse be condemned, the condemnation to date from May 1st, 1907.

After consideration of the above report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the Center Grove, White River Township, high-school building, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered. That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

REPORT OF INSPECTION OF SCHOOLHOUSE AT NEWBERRY, GREENE COUNTY, INDIANA, MARCH 29, 1907.

Site.—The building is on a hill on the east side of town. The ground comprises about one acre. The soil is a mixture of clay and sand; no trees on the lot, and the approach is by gravel road. There are no walks about the premises. The site is a good one for building, as the ground slopes away in all directions and can have a good drainage from the school building to the river about a quarter of a mile north of the building.

Building.—The building consists of three rooms, brick, with shingle roof. The roof is in very bad shape, water spouts are broken and torn loose, and the woodwork around the eaves has rotted so that holes are appearing through the edges. The main building consists of two rooms with halls. No basement, and no ventilation except by opening in the walls, underneath the floors. Stone foundation of about 18 inches above ground. An addition has been added to the east, of a brick room, built of brick from foundation to top, and without slate or other means of checking the rise of moisture from the basement to the walls of the rooms. It has been built about twenty years.

The first primary room is the one-story addition, size 20x30x12 feet. Number of pupils enrolled, 60; average attendance, 53. Floor in good shape. Blackboards are of wood on two sides of the room; seats in fair condition; heating by stoves, ventilation by windows and doors. Diseases prevalent in this room were colds and sore throats; had no fevers or contagious diseases reported from the room during the winter.

Main Building.—Room, first floor, used for intermediate; size 25x38x12 feet. Enrollment of 55, average attendance, 45. Blackboards wood, on three sides. Seats in fair condition. Heated by stoves, ventilation windows and doors. Floor worn, but oiled and clean. The stove is situated about the center of the room and there is a wooden pillar in the center of the room to support the floor of the room above. Walls are cracked and paper torn and discolored, showing leakage and sweating of walls. The diseases were colds and sore throats.

The hall consists of a room about 7x20 feet used for cloakroom and storage; main entrance, 10x12 feet, and the stairway enclosed leading to the upper floor. The stairway in poor condition. The supports to the landing at the upper end have given away and have had to be propped up underneath by posts. It is considered unsafe.

Second floor consists of a hall used for recitation room, size 10x20x12, less the stairway, about 3½x10 feet. This room is lighted by three windows, heated by a stove, ventilated by windows.

The main room is 25x38x12, is used for the eighth grade and high-school. There are two teachers in this room. Enrollment, 65; average attendance, 58. Ceiling of the room is wood, blackboards slate and wood, floors are worn, room heated by a single stove, ventilated by windows. The plastering on walls badly cracked, paper discolored and torn in many places, showing a great deal of leakage from the roof.

The name of the trustee is Wm. Neff. Mr. Neff informs me that the building has been considered unsafe by the Board for the past two years. His advisory board accompanied us through the house during inspection and confirmed his report. The township is out of debt and in good shape to build at this time. I would advise the condemnation of the building, as being both unsanitary and unsafe, and is also entirely too small for the needs of the town. The population of the town is about 1,200, and, with a new, modern building, they could accommodate three or more school districts in the one building, which the trustee wished to do.

After consideration, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the schoolhouse at Newberry, Greene County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT ORLEANS, ORANGE COUNTY, INDIANA, APRIL 8, 1907.

Site.—In the central part of the town, occupying one block. High and dry. Lot well covered with shade trees. Approach on the north and south by good cement walks, and from the street to the building. Building is surrounded by a good cement walk. Outbuildings are in good condition, with dug vaults and surrounded by high board fences, with a tight board fence, entirely separating the two sexes. There are good cement walks leading to each of these buildings, which are kept in a very clean, sanitary condition.

Building.—The building is two stories, brick, with metal roof. The main part built in 1871. Two additions have been added to the building since then on the west. The last addition on the south end of the west part was not well fastened to the building, and is beginning to pull away from it, at this time being a crack $1\frac{1}{2}$ inches wide at the top and probably $\frac{1}{4}$ of an inch at the base of the building, from top to bottom. Walls are in fair condition.

Basement.—This has been dug out under the west portion of the building and is a room about 18x20x10 feet. It has never been walled or floored. From this room narrow passageways have been dug to the hall in the center of the building and underneath the building, so that pipes for carrying steam to the different rooms and for ventilation in the upper story, could be placed under the building. The entire building is heated by steam from a furnace in this basement.

First Floor, Primary Room.—Size 30x30x12. The blackboards in this room are of slate on three sides of the room. Seats are in fairly good condition. Enrollment is 60, average attendance, 50. Windows, 5, about half of them with blinds. Seats arranged so that light falls over the back and right shoulder. Ventilation by windows. Floors are in fair condition, oiled and clean, but is pulling away from the wall at the north side of the room. Walls are papered and in good condition.

Intermediate Room.—Size 30x45x12. Blackboards in this room are painted on the plastering. Seats in fair condition. Enrollment, 40; average attendance, 37. Eight windows in this room, on the sides of the room. Ventilation by windows and doors. Floors oiled and in good condition. Walls in fair condition only, the papering on the outside wall being cracked and plastering cracked somewhat. Pillars in this room, supporting the floor of the room above.

Third and Fourth A Grade Room.—Size 22x30x12. Enrollment, 60; average attendance, 51. Blackboards, slate; six windows in the room, north windows without curtains. Floor is pretty badly worn, but oiled and clean. Walls in fair condition, ceiling is sagging probably four inches lower in the center than at the sides.

Fourth B and Fifth Grades.—Size 20x25x12. Blackboards, slate; seats fair. Enrollment, 63; average attendance, 54. Ventilation, windows. Five windows in this room, with shades to the windows. Floors oiled, fair condition, clean. Walls are good.

Second Floor, Sixth and Seventh Grades.—This room is 24x30x16. Enrollment, 52; average attendance, 47. Blackboards slate, seats fair, four windows in each side of room, blinds to the windows, ventilation by windows and airshaft in the northeast corner of the room. This airshaft consists of simply a square board box, and opening out into the room. Floors are sagged badly, but in fairly good condition, oiled and clean. Plastering cracked. Walls papered.

Eighth Grade and High-School.—Size, 30x45x16. Enrollment, 89; average attendance, 79. Blackboards slate, on four sides of the room. Seats good. Six windows, three on each side of the room, north and south. Blinds to each window. Ventilation, windows and air shaft. Floor fair condition, worn, but oiled and clean. Walls in fair condition.

The hall on the east side of the high-school room is used for library and reading and recitation room. It is 14x24x16 feet. There are six windows in this room, with four of them curtained. Library comprises 500 volumes, all new and up-to-date books of reference. The hall between this room and the addition is 14x32x16, and divided by a partition, so that the south half can be used as the superintendent's office, giving him a room 14x18x16. The other part is used as a part of the stairway and a cloakroom. There are no cloakrooms on this floor. On the west side of this hall is a room 24x30x16, used for a chemical laboratory and recitation room for the high-school and eighth grade. The description of this is the same as the other rooms, as to walls, floors and windows. Adjoining this on the south is a room 15x24x16, which is used for the study room for a few of the pupils who were taking special courses in typewriting, bookkeeping and a general business college course. Ventilation of this room is by two windows on the west, which have no blinds, and the room, owing to its situation, is rather dark, as there is no light except on the west.

Remarks.—The playing-grounds and everything around it shows the utmost care and attention to neatness and cleanliness. There were no bad odors in the building, no smell of foul air in the basement, and everything seemed to be as clean as it was possible to make it, which is owing to the fact that the superintendent, Prof. A. C. Payne, personally superintends this work and sees that it is thoroughly carried out. If it were not kept in that condition, it would be unfit for use as a school building in very short order. It will be impossible to remodel this building so as to give perfect ventilation in its present condition. It is old, would not stand the repairs and is not on the proper site for the erection of a new building, being surrounded on three sides by business blocks, on the fourth side by residences, and also having an iron hitch-rack on the three sides which are used for a public hitching place for the entire community. I was accompanied on this inspection by Dr. Thos. B. Ritter, city health officer, and by Superintendent Payne, who showed me every courtesy and facility for examining the building. After the inspection I met Dr. G. W. Taylor, one of the town trustees, and talked with him in regard to the building and the feeling of the patrons in the matter. I was informed that a majority of the taxpayers and patrons felt that they needed a new, modern, sanitary building, that would give them more room; that the rooms were overcrowded as it is. The superintendent also thought that in such a building as that there could be a consolidation of nearly all the schools in the township in that one school, therefore making it more economical and better for the patrons of the township. He states that the town is supplied with good gravel roads leading in all directions.

Recommendations.—I would recommend that the building be condemned for school purposes and that notice of the same be sent to Dr. G. W. Taylor, trustee.

After consideration of the report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the schoolhouse at Orleans, Orange County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

SANITARY INSPECTION OF GREENSFORK SCHOOLHOUSE No 17.
CLAY TOWNSHIP, WAYNE COUNTY.

Inspection made March 26, 1907.

Site.—The present site is satisfactory, although in places a little lower than the street. Area about one-half acre. Soil is quite gravelly and hence very rarely wet. The approach to the schoolhouse is by means of a broad cement walk, leading from another cement walk which lines the main street.

Schoolhouse.—Built in 1877, two-story brick, stone foundation. No basement. Many cracks in walls, down spouts broken on all four corners, thus contributing to the dampness of the walls. Plastering has been washed out from between the bricks where the rainwater has come down the broken spouts. House contains four rooms, two above and two below, and the building faces south. All rooms heated by stoves and ventilation by windows. Entrance is by vestibule, which is two stories high. Narrow stairway, twenty stairs and one turn, very steep and badly worn, leads to the upper story. This stairway constitutes a plain fire trap. If the building were ever to catch fire, a great many lives would undoubtedly be lost in this narrow stairway and vestibule. The vestibule is unwarmed, the ceiling above is broken, and through the steeple can be seen the sky. This cold, damp vestibule furnishes the cloakroom facilities for the whole school.

Summary.—This schoolhouse is very faulty in construction, is improperly warmed, improperly heated and improperly ventilated. Much sickness prevails among the pupils and there is general complaint in the neighborhood concerning the unsanitary features of the building.

Recommendations.—I recommend that this building be condemned on account of its unsanitary conditions, and that said condemnation be dated from May 1st, 1907.

After consideration of the report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Greensfork schoolhouse No. 17, Clay Township, Wayne County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

SANITARY SURVEY OF FOUR SCHOOLHOUSES SITUATED IN BATH TOWNSHIP, FRANKLIN COUNTY, APRIL 8, 1907.

SHEWMAN SCHOOL, DISTRICT NO. 5.

Site.—This schoolhouse is situated at country cross roads, covers about one-half acre of ground, is high and passably well drained. This is a passably good site.

Building.—The building is frame, constructed fifty-one years ago, one room, foundation stone, which is broken and dilapidated in places. Roof and weatherboarding in bad condition, no basement, chimney dilapidated. Outhouses abominable in every particular; dug well, but water is not good and pump broken.

Interior.—Rooms, 30x28x14. Enrollment, 32. This gives ample cubic space for each pupil. Blackboards good, heated by stoves and ventilated by windows, floor is very bad, the plastering is cracked on the walls and on ceiling. The teacher reports prevalence of coughs, colds, headaches and eyeache.

Summary and Recommendation.—This is an old, dilapidated and worn-out schoolhouse, and very unsanitary. I recommend that it be condemned for school purposes and that the condemnation be dated June 1st.

After consideration of this report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Shewman schoolhouse, District No. 5, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

DUBOIS SCHOOLHOUSE, DISTRICT No. 9.

Site.—The site is at the cross roads, is very low and damp. Water stands upon the grounds in wet weather, outhouses are old, dilapidated and abominable; no paths leading to them; dug well, water bad and pump broken.

Building.—The building is old, built in 1859, forty-eight years ago; one room, weatherboarding broken in places, roof very bad, sills rotten, the foundation is stone, broken and torn in places; chimney badly broken and dilapidated.

Interior.—The room is 32x27x14 feet. Enrollment of pupils is 21, average attendance, 18. Ample space for the pupils. Heated by a wood stove, lighted by six windows, three on each side, with no shades. Black-

boards good, floor very bad, ceiling and walls cracked in places, the plastering has fallen from the ceiling and the broken place covered with heavy paper held together by tacks. Coughs, colds and headaches prevail among the students. One student has complained of an eyeache and probably suffers from astigmatism.

Summary and Recommendation.—This is an old building, dilapidated, very unsanitary and unfit for school purposes. I recommend that the same be condemned as unfit for school purposes and that the condemnation be dated June 1st.

After consideration of the report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Dubois schoolhouse, District No. 9, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

HETRICK SCHOOL, DISTRICT No. 8.

Site.—The site covers about one-half acre of ground lower than the road, is very damp and wet. In rainy weather pools of water stand upon the playgrounds. Outbuildings abominable, with no paths to them; dug well, pump broken, water has offensive taste.

Building.—The building is old, dilapidated frame, about fifty years old; stone foundation, which is broken, and in one place almost entirely removed; sills are rotten, roof is very bad and leaks, weather boarding broken in places, steps to front door broken and dilapidated, chimney badly worn.

Interior.—The interior is 28x33x44, and is heated by a stove. Enrollment, 10; average attendance, 9; ample space for pupils. Lighted by six windows, three on each side; no window shades; wooden blackboards, floors badly worn, plastering cracked. Coughs, colds and headaches prevail among the pupils.

Summary and Recommendations.—This is an old wornout schoolhouse, and is unfit for school purposes. I recommend that it be condemned for school purposes and that the condemnation be dated June 1st.

After consideration of the above report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that

the Hetrick schoolhouse, District No. 8, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

MIXERVILLE SCHOOLHOUSE, DISTRICT No. 7.

Site.—Site covers about one-eighth of an acre, is high and dry and good in every respect; outbuildings are abominable, no paths leading to them; dug well, pump broken, water has a bad taste and not used.

Building.—The building is a frame, one room; stone foundation, which is broken and torn; weatherboarding broken, roof bad, chimney in passable condition. Building is fifty-one years old and dilapidated, steps old and broken.

Interior.—The interior is 27x33x14. Enrollment, 24; average attendance, 22. Floors very bad, patched and broken in places; lighted by seven windows, four of them having shades and three without shades; plastering is cracked and broken in places; blackboards painted on walls, but some are slate. The children have coughs, colds, headaches and eyeache.

Summary and Recommendations.—This is an old, dilapidated schoolhouse, and unfit for school purposes. I recommend that it be condemned for school purposes and that the condemnation be dated June 1st.

After consideration of the above report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Mixerville schoolhouse, District No. 7, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

The following report, by Dr. Knabe, was read and ordered spread of record:

REPORT OF THE INVESTIGATION OF AN EPIDEMIC AT YOUNG AMERICA, IND.

By Dr. Helene Knabe.

By order of Dr. J. N. Hurty, secretary of the State Board of Health, the undersigned, on February 28th, went to Young America, Indiana, to investigate what was claimed to be a wholesale infection of malaria. There was some difference of opinion among the physicians, and Dr. G. D. Marshall had asked for the aid of the State Board of Health in order to clear up the matter.

Arriving at Young America, I attempted to consult with the physicians, of whom there are three in the town, but was unable to gain any information as to the situation; instead, was met in one case with discourtesy. As a consequence, my observations were limited to the patients of one physician.

In regard to the beginning of this trouble, I ascertained the following: Cases of malaria were frequently diagnosed by the three physicians during the fall season of last year, though only Dr. Marshall, being in possession of a microscope, tried to confirm this diagnosis by the examination of fresh blood in which he found what he considered to be plasmodium malariae. The cases improved rapidly under antiperiodic treatment, followed by the usual tonics for post-malarial anemia, and nothing further was thought of it.

With the advance of the winter season, there still continued to occur some cases in which the symptoms resembled closely those seen in the fall, and as Dr. Marshall found the conditions in the blood of those patients the same as present in the previous cases, he saw no occasion to change either his diagnosis or treatment. The other two physicians made a diagnosis of la grippe. As far as I was able to judge by an interrogation of patients who were ill during October and November, they had practically the same symptoms as those which developed the disease during my stay at Young America.

Symptoms in severe cases of this kind are as follows: The onset is usually sudden, sometimes preceded by a short period of general malaise; the patient is seized with an attack of vertigo, blindness and nausea. Many cases present history of prolonged vomiting, and those most severe were accompanied by profuse watery diarrhoea and great prostration, bordering on collapse. Pain in the epigastric region is present in all severe cases. A few cases gave a history of bloody stools. Liver and spleen were very tender to pressure; backache pronounced only in such cases where the prominent feature of the disease was neuritis. The temperature was, as a rule, subnormal, very few cases showing fever of 103° to 105° at the beginning. Distinct rigors were rare. Patients complained of chilly sensations, rapidly becoming very weak and showing more or less cyanosis, presenting in a few hours the aspect of a very severe illness.

A peculiar feature in these cases was the extreme bradycardia. The pulse ranged from 52 to 60 per minute, and very few cases did I see with a pulse rate of 110 to 112.

The blood pressure was universally low. The temperature was mostly

subnormal and often remained so for days. We recorded some of 96.5°. The usual rate was about 97° to 97.5°.

The nervous symptoms in all cases were very pronounced. Aside from those mentioned, there appeared in a majority of cases as a complication a severe neuritis. Herpes labialis, and the various hyperaesthesias and paraesthesias were common. Herpes zoster occurred in one case. The mental depression seemed to be far out of proportion to the local symptoms.

Respiratory symptoms were usually absent. A few cases presented symptoms of slight pharyngitis, which subsided promptly on application of an antiseptic gargle. The lungs and bronchial tubes were entirely clear in all cases which I examined, with the exception of two children, one and three years of age, respectively, where I found a few fine, moist rales.

A variety of symptoms involving the skin were present in this epidemic. There was itching over the whole surface of the body, followed by either diffuse redness or circumscribed elevated patches. Where the latter were present part of the swelling subsided in three or four days, leaving a small, shot-like eruption of blue-red color. I saw the last-named eruption in five cases.

Another symptom, which for some time made diagnosis a little doubtful, was extensive exfoliation. While not present in every case, it was very profuse where it did appear. The character of this exfoliation was variable; the epidermis separating either in very fine scales or large flakes. A constant symptom was jaundice without the presence of clay-colored stools, a fact which makes it appear that it was of haematogenous origin.

Considering the fact that Dr. Marshall claimed to have found plasmodium malariae in the blood of these patients, I examined fresh, as well as stained preparations, in every case which developed during my stay at Young America. The blood presented a very unusual appearance. The variation in size of the red corpuscles was the greatest I have ever had occasion to observe in any specimen of fresh blood. Leucocytosis was not universally present. The amount of hemoglobin was about 70 per cent. according to the Tallquist scale. Vacuolation appeared in the red corpuscles, and their peculiar shape, as well as the fact that they were in reasonably small numbers, probably made the resemblance to hyaline forms of the aestivo-autumnal parasite most striking. Aside from this, the specimens contained large numbers of colorless granules, about 2 microm. in diameter, each of which contained a slightly refracting dot, giving the appearance of a minute nucleus. These granules were so much larger than the ordinary blood test that I was in doubt for some time as to their exact classification. I am of the opinion that they were merely evidences of an extreme hemolysis, but must confess that they resemble the spores of plasmodium malariae in some respects.

I sent several preparations to Dr. Ludwig Hectoen of Chicago, with a short note; but as my letter of explanation, which I subsequently wrote, was not delivered to him, but returned to me, the preparations were spoiled before he could make a careful examination, and it was impossible to determine whether or not malarial parasites were present in the blood.

The letter from Dr. Hectoen stating his opinion is appended to this report.

In summing up the conditions, it is readily seen that with symptoms of the kind described, these cases when they occurred in October and November, could be taken for the algid type of aestivo-autumnal malaria (Osler on Malaria), rare though that condition may be in our climate. Indeed, Dr. Gray, who was affected with this trouble last fall, made this diagnosis of his own case. He admitted suffering from a train of symptoms the same as detailed, which readily improved under anti-periodic treatment. Dr. Marshall developed the same disease and treated himself for malaria with good results. On the other hand, the purely abdominal type of influenza, as it would appear to be here, is not a frequent condition either (Osler on Influenza), and the absence of respiratory symptoms would make the diagnosis at least a little doubtful unless the epidemic feature of the disease were prominent. That this was not the case is shown very well by the history obtained in some families where one member was attacked in the early fall season, the others remaining well for weeks, eventually to become ill with the same symptoms.

Altogether I saw sixty cases, some of them having recovered entirely, some convalescent. Fifteen developed the disease during the time from February 25th to March 12th. The history was alike in all cases.

I have no doubt that at least a certain number of those occurring last fall were of true malarial origin, especially so since the conditions in the vicinity of Young America are such that malaria might be present to some extent.

Dr. B. W. Egan of Carroll, Indiana, a small town near Young America, informed me that he had a patient in February, who, in the doctor's opinion, was suffering from a true malaria (no blood examination made).

As to the cases developed during my stay at Young America, I did not feel justified in pronouncing them either malaria or influenza before I had carefully examined all the blood specimens from these cases. This, however, was impossible under the conditions obtaining, and I reserved that part of the work until after my return to the Laboratory of Hygiene.

The presence of influenza bacilli in nose and throat of these patients would have made very little difference in my opinion, as, from the results of sputum examination in the Laboratory of Hygiene, I infer that Pfeiffer's bacillus is at present found in nearly every case of catarrhal condition affecting the upper air passages.

Under ordinary circumstances, I should have had no hesitation in suggesting the possibility of influenza, but as the professional discontent here was greater than I have ever experienced anywhere, and besides disseminating many untrue rumors about statements I was alleged to have made—one physician going so far as to secure the aid of a third person to get from me a confidential statement of my opinion regarding the situation—I thought it the best policy to withhold my opinion entirely, stating that the State Board of Health would probably inform Dr. Marshall as to their conclusion in the matter, if they should think fit to do so. This kind of procedure may not be what is expected of me, but I beg to be permitted to say that I believe it served to the best advantage in the situation as I saw it.

It has been my constant endeavor to avoid such actions as might be construed as if I favored any of the parties concerned, at the same time trying to do all that was possible for the interest of the patients and to maintain the dignity of an employe of the State Board of Health.

Respectfully,

HELENE KNABE, M. D.

The secretary announced that the term of Dr. M. M. Haas, of Evansville, expired June 1, 1907, as a member of the State Board of Dental Examiners, and that it was the duty of the Board of Health to elect his successor.

Dr. Tucker moved that Dr. M. M. Haas be elected a member of the State Board of Dental Examiners for the two years term beginning June 1, 1907. Seconded by Dr. Wishard.

Unanimously carried.

Ordered, that the Annual Conference of Health Officers be held for one day, May 21st, 1907, and that the secretary prepare a program.

Ordered, that Drs. Tucker and McCoy act as delegates from the Board to attend the annual meeting of the National Tuberculosis Association, which will be held May 6-7-8, 1907, in Washington, D. C.

Ordered, that the secretary go as a delegate of the Board to the annual conference of State and Provincial Boards of Health.

After discussion, the following rule was unanimously adopted:

**RULE IN REGARD TO THE DISPLAY FOR THE PURPOSE OF SALE
OF FOOD PRODUCTS UNLESS PROPERLY PROTECTED.**

Rule.—“No manufacturer, dealer, vender or other person shall expose for sale or exchange, or sell, any bread, pastry, confectionery, shelled nuts, or other food so prepared that it is ready for consumption, unless such food is properly protected from insects, dust, dirt and other foreign or unwholesome material by suitable coverings.”

SPECIAL MEETING INDIANA STATE BOARD OF HEALTH.

MAY 21, 1907.

Called to order by President Tucker at 1 p. m. Present: Drs. Tucker, McCoy, Davis, Hurty.

President Tucker announced the object of the special meeting was to consider affairs concerning the annual health officers' school and to act upon such matters as might be brought before the Board.

The secretary announced the attendance at the conference to be 276. Sixty-eight counties, 110 cities and 164 towns were represented.

According to the resolution of the State Board, the meeting was for only one day, with morning, afternoon and evening sessions. The program was as follows:

FIRST SESSION.

Tuesday, May 21, 1907, 10:00 a. m.

Called to order by F. A. Tucker, President.

Address—"The Health Officer and Public Charity Work."

Mr. Amos W. Butler, Secretary Board of State Charities.

Paper—"The Sanitary Disposal of Garbage and Night-soil in Small Towns."

Dr. George Lake, Health Officer, Wolcottville.

SECOND SESSION.

2:00 p. m.

"The Preparation and Standardization of Diphtheria Antitoxin."

C. S. McKee, Chicago Memorial Institute for Infectious Diseases.

"Streptococcus Infection in Diphtheria."

Hugh A. Cowing, Health Officer Delaware County.

Discussion—Opened by H. R. Spickerman, Health Officer, Muncie.

"How the Bacteriological and Pathological Laboratory Can Help Physicians in the Cure and Prevention of Disease."

J. B. Rucker, Jr., Superintendent State Laboratory of Hygiene.

THIRD SESSION.

8:00 p. m.

"A Review of the New Laws Pertaining to the Public Health."

J. N. Hurty, Secretary State Board Health.

KEMPTON, TIPTON COUNTY, IND. INSPECTION OF SCHOOL HOUSE, DISTRICT No. 3, May 1, 1907.

Site.—The building is situated in the southern part of the town, just outside of the corporation. The plat of ground upon which it is situated is somewhat higher than the surrounding territory and could be properly drained. The yard contains about two acres and is well sodded. The water supply comes from a dug well and every opportunity is afforded for surface water to drain into it.

Approaches.—There are two walks leading to the building. The one to the west entrance is of brick and is in fair condition. The one to the east entrance is part of cinders and part of boards. There are no walks to the outhouses.

Outhouses.—The outhouses are in bad condition, being worn and filthy and affording no privacy for individual pupils.

Building.—The building is a two-story brick with a slate roof and a

brick foundation. There are two layers of limestone laid in the walls at the ground surface. The floors are not elevated much more than the ground surface. The building consists of a very old part containing four rooms, two above and two below, and a new addition, built in 1901, containing one main room on each floor, with small recitation, cloak and storage rooms communicating with each, and a large hallway on each floor, which connects the rooms of the old and the new parts. The walls of the old part are cracked in many places and are stayed by iron or steel rods passing from the west to the east walls. Those rods are four in number, and are about $1\frac{1}{2}$ inches by two inches in diameter. The water spout from the roof down the south wall of the building is gone and the wall is watersoaked outside and inside.

The roof is in bad condition. The ceilings of the upper rooms in the old part and the ceiling of the upper hall in the new part are much damaged by leakage.

Basement.—The basement is located in the northeast corner of the new part under the primary room. It is 25 by 31 feet and is 8 feet deep. It has a dirt floor. The boiler for the hot-water heating plant and the coal room are located in the basement. The basement is not well drained and water lines on its walls show that the water has risen as high as four feet. The janitor says that the fires have been put out several times, that the school has been dismissed for a week at a time and that it is not an uncommon thing for him to have to use rubber boots to wade in the basement when attending to the fire. He attributes the above condition to the back water of a tile drain.

Ventilation.—There are no means of ventilation except by the windows and doors.

Heating.—The building is heated by a hot water system. There are two radiators placed along the rear walls of each room. On the lower floor, water pipes 5 inches in diameter run along the baseboards to the registers and small pipes 2 or 3 inches in diameter lead from these pipes to the radiators on the upper floors. The janitor says that in cold weather it is impossible to get the rooms warm.

Stairways.—The stairways lead from each end of the lower hall and wind about and come to the same landing in the upper hall. This landing is about 4x6 feet. There would be great danger in case of fire, as this landing is the only exit for over one hundred pupils.

Primary Room.—The primary room is located on the first floor of the new part, just over the basement. It is 25x30 feet in area. It is lighted by six windows, each 3x7 feet. Three are in the north wall and three are in the east wall. This room seats thirty pupils. To the west of the room are two small rooms, each 12x12 feet, used for cloak and storage rooms.

High School Room.—This is situated just above the primary room and is a duplicate of it, except that instead of there being two rooms west of it, all the space is thrown into one room and used for the recitation of classes. The high school room seats thirty pupils.

Room of Second and Third Grades.—This room is located in the east end of the old part on the first floor. It is 36 feet by 26 feet in area and

is lighted by six windows, four in the east wall and two in the south wall, each being 3x7 feet. There are thirty-six pupils in this room.

Room of Sixth and Seventh Grades.—This room is located just above the one just described and is a duplicate. It seats thirty-six pupils.

Room of Fourth and Fifth Grades.—This room is located in the west part of the old part, on the first floor. It is 36x26 feet in area and is lighted by six windows, two in the south wall and four in the west wall, each being 3x7 feet. This room seats thirty-eight pupils.

Room of Eighth Grade.—This room is situated just above the one last described and is a duplicate of it. It seats forty-six pupils.

After a full consideration of the above report of inspection, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health in special session at Indianapolis, May 21, 1907, that the school house at Kempton, Tipton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said school house is formally condemned for school purposes and shall not be used for said purposes after June 1, 1907.

Any school trustee, township trustees, or school teacher or other person who may use said school house for school purposes after June 1, 1907, shall be promptly prosecuted, as by the statutes provided.

BRINGHURST, IND., INSPECTION OF SCHOOL HOUSE, DISTRICT No. 3, MAY 2, 1907.

Site.—The building is located in the southeast part of the town. It is located upon a rather high plat of ground, it being a very suitable location from a sanitary point of view. The plat contains about an acre of ground. It is well sodded and there is a good driven well located in the front part of the plat.

Approaches.—Board walks lead to the building, but there are no walks to the outhouses.

Outhouses.—The outhouses are in bad condition and are unsanitary.

Building.—The building is a two-story brick structure with a stone foundation and a shingle roof. The waterspouts are broken and the walls badly watersoaked. The lower floor is just above the ground surface. The building is built in a T shape, as shown in drawings. There are four rooms and four hallways. Two rooms are in the foot of the T and two in the head. The building faces the north. The north wall is badly cracked from the top almost to the bottom, and one may look through this crack from the inside of the building and see the town of Flora, some two miles distant. The walls of this part are stayed by iron or steel rods running from the east to the west wall. There are cracks in other walls of the building through which one may see. The walls of the building are in a dangerous condition.

Ventilation.—There are no means of ventilation except by the windows, doors and cracks through the walls.

Heating.—The building is heated by means of stoves placed near the centers of the various rooms.

General Condition of Interior.—The ceilings and walls are cracked and great patches of plastering and paper are gone. The floors are, of course, rough material and are uneven, shaky and dangerous. The floors, walls and ceilings are filthy, and unsanitary beyond description.

Room of Primary Grades, 1, 2, 3, 4.—This room is located on the lower floor of the north end of the building. It is 30x32 feet and is lighted by six windows, three in each side wall, each window being 3x7 feet. There are forty-six pupils enrolled in this room.

Room of Fifth and Sixth Grades.—This room is located on the lower floor in the south part of the building. It is 26x30 feet and is lighted by three windows, each 3x7 feet, in the south wall, and one window 3x7 feet in the north wall of the T-projection. Lamps have been used in this room during school hours for the children to see to study. Forty pupils are enrolled in this room.

Room of Seventh and Eighth Grades.—A winding stairway 4 feet wide leads from the lower front hall to the upper front hall and from this hall the room is entered. The room is a counterpart of the primary room below. Its floors are unstable and unsafe. There are thirty-eight pupils enrolled in this room.

Room of High School.—This room is located on the upper floor of the south part of the building. A winding stairway, 4 feet wide, leads from the lower west hall to the upper west hall, and from this hall the high school room is entered. This room is like the room of the fifth and sixth grades just below it, except that it has three windows each 3x7 feet in the east wall in addition to the three in the south wall and the one in the north wall. Thirty enrolled.

Conclusion.—The above-described building is totally unfit for school purposes and should be condemned.

After full consideration of the above report of sanitary survey, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21, 1907, that the school house at Bringham, Indiana, Carroll County, District No. 3, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said school house is formally condemned for school purposes and shall not be used for said purposes after June 1, 1907. Any school trustee, township trustees, or school teacher or other person who may use said school house for school purposes, after June 1, 1907, shall be promptly prosecuted as by the statutes provided.

BURROWS, CARROLL COUNTY, INDIANA, INSPECTION OF SCHOOL
HOUSE, DISTRICT No. 2, MAY 2, 1907.

Site.—The building is located in the northeastern part of the town. The plat contains about eight town lots. The plat is well drained and the yard is well sodded. The south end of the plat is about two hundred and fifty feet from the railroad. This site has been condemned by the County Board of Health on account of its nearness to the railroad.

Approaches.—There are no approaches to the building or outhouses.

Building.—The building is a two-story brick with a shingle roof. The building faces the west. The east wall is cracked. The building is stayed by rods running from the north to the south walls. The lower floor is not far above the ground surface.

Ventilation.—There are no means of ventilation except by the windows and doors.

Heating.—The rooms are heated by means of stoves placed in the centers of the respective rooms.

Halls.—There are two halls, one below and one above, situated at the front end of the building. These halls extend the entire width of the building and are about ten feet wide.

Stairways.—Two stairways lead from the lower hall to the upper hall. They are about four feet wide. They are located at each end of the hall and wind about to reach the upper hall.

Lower Room.—This room is 40x30 feet. It is lighted by eight windows, each 3x7 feet. There are four in the south wall and four in the north wall. The floors are rough and unsanitary. The walls and ceilings are dirty. Three wooden pillars, 6 inches by 6 inches, run from the floor to the ceiling, to support the floor of the upper room. This room is occupied by the first, second and third grades. The enrollment is thirty-six pupils.

Upper Room.—This room is a duplicate of the lower room. Its walls and ceilings are filthy and unsanitary. Its floor is rough, dirty, sagged and dangerous. This room is occupied by the fourth, fifth and sixth grades. The enrollment is thirty pupils.

Seventh, Eighth and High School.—This part of the school is carried on in a wooden store building, formerly used for implements. It contains an upper and lower room. It is a long, low building, like the usual wooden country store building. Access could not be gained to it, but from what could be seen from the outside it is totally unfit for school purposes.

Remarks.—The trustee says he has tried and is trying to erect a new modern building; his plans are frustrated by the advisory board, all of whom live in the other end of the township, some five and a half miles away.

The building should be condemned.

After full consideration of the above report of sanitary survey, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session, at Indianapolis, May 21, 1907, that the schoolhouse at Burrows, Carroll County, Indiana, District No. 2, is old,

dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purpose after June 1, 1907. Any school trustee, township trustees, or school teacher or other person, who may use said schoolhouse for school purposes, after June 1, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOL HOUSE, JAMESTOWN, BOONE COUNTY, INDIANA.

Site.—The school is located in the northeast part of the town. The plat contains about eight town lots. It is very high and dry. It is well drained and well sodded and contains sufficient trees. It is a beautiful and sanitary place for school purposes. The water supply is from a dug well.

Approaches.—Wide cement walks lead from the sidewalk of the street to the building. There are no walks to the outhouses.

Outhouses.—The outhouses are worn, dirty and filthy. They afford no privacy for individual pupils.

Building.—The building is a very old two-story brick, with a brick foundation and a shingle roof. It faces the south and is about eighty-four feet long from north to south and about fifty feet wide from east to west. The walls are stayed by fine, large, iron or steel rods running from the east to the west wall. The wall appears plumb and in good condition. The roof appears old and worn, but there is no indication of leakage except around the belfry.

Basement.—There is a basement under the northeast corner of the building in which is located the coal room and boiler. Entrance could not be gained to it, but the principal of the school says it is cemented and is dry.

Heating.—The building is heated by direct steam heat. There are two radiators in each of the four south rooms and three in each of the four north rooms.

Ventilation.—Ventilation is carried on by a gravity system of very poor quality and by the windows and doors.

Hallways.—There are two main hallways, one on the lower and one on the upper floor, running from the west to the east of the building and near its center north and south. These hallways are each eight feet in width. On the upper floor a branch hall six feet wide leads from the center of the main hall to the south front of the building. There is an entrance hall, 12 feet by 24 feet, and one story high, built at the south entrance of the building and leading into the two lower south rooms. There is also an entrance hall, 12 feet by 24 feet and one story high, built at the west entrance of the building and leading into the lower main hall.

Stairways.—There is one winding stairway, three feet wide, leading from the east end of the lower main hall to the east end of the upper main hall. This would be inadequate in case of fire.

Floors.—The floors are splintered, rough and dirty.

Walls and Ceilings.—The walls and ceilings are filthy and unsanitary, except the high-school room, which has a nicely-painted steel ceiling.

Primary Room.—This room is located on the lower floor, in the southeast corner of the building. It is 24 feet by 34 feet in area. It is lighted by four windows, each 3 feet by 8 feet. One window is in the south wall and three in the east wall. This room contains forty pupils. It has two entrances, one into the south entrance hall and one into the lower main hall.

First and Second Grade Room.—This room is located on the lower floor, in the northeast corner of the building. It is 24 feet by 42 feet in area. It is lighted by six windows, each 3 feet by 8 feet. Two are in the north wall and four in the east wall. There are forty pupils in this room.

Third and Fourth Grade Room.—This room is located on the lower floor, in the northwest corner of the building. It is 24 feet by 42 feet in area. It is lighted by six windows, each 3 feet by 8 feet. Two are in the north wall and four are in the west wall. There are forty pupils in this room.

Fifth and Sixth Grade Room.—This room is located on the lower floor, in the southwest corner of the building. It is 24 feet by 34 feet in area. It is lighted by four windows, each 3 feet by 8 feet. One is in the south and three in the west wall. There are forty-five pupils in this room.

Seventh and Eighth Grade Room.—This room is located on the upper floor in the southeast corner of the building. It is 21 feet by 34 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Two are in the south wall and three are in the east wall. This room has thirty-six pupils enrolled.

High School and Assembly Room.—This room is located on the upper floor in the north end of the building. It is 48 feet by 42 feet in area. It is lighted by twelve windows, each 3 feet by 8 feet. There are four windows in the east, west and north walls respectively. This room may be separated into two rooms by sliding doors, making an east and a west room. Forty pupils are seated in the east room.

High School Recitation Room.—This room is located on the upper floor in the southwest corner of the building. It is 21 feet by 34 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Two are in the south wall and three are in the west wall.

Remarks.—The trustee is building a modern new building in his township at Advance, Ind. He has issued twenty thousand dollars' worth of bonds to enable him to build. This leaves him in such a financial condition that it would be difficult for him to build at Jamestown.

Recommendations.—It is respectfully recommended that he be allowed to continue to use the building at Jamestown until such a time as he is in financial condition to erect a modern building, but not until he has complied with the following suggestions:

The outhouses should be repaired, made sanitary, and provided for individual privacy.

The floors, walls and ceilings should be repaired, cleaned and made sanitary and presentable.

Fresh air pipes should be placed in the windows over each steam radiator.

The entrances to the foul air shafts should be enlarged and properly placed.

Another story should be added to the south entrance hall and a wide stairway run from the lower floor of it to the upper floor and a connection made with the upper branch hall. This would lessen danger in case of fire.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21, 1907, that the school house at Jamestown, Boone County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said school house is formally condemned for school purposes after June 1, 1907. Any school trustee, township trustees, or school teacher or other person who may use said school house for school purposes, after June 1, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT KIRKLIN, CLINTON COUNTY, IND., MAY 6, 1907.

Site.—The school is located in the northwestern part of the town. The plat contains eight town lots. It is well drained. The playground is covered with a good sod. A good driven well, one hundred and twenty feet in depth, is located in the front end of the grounds.

Approaches.—There is a wide cement walk leading from the street to the building.

Building.—The building is a very old, two-story brick, with a stone foundation and a shingle roof. It consists of an original building and an addition joined onto it. The lower floors are flush with the ground surface. The downspouts are broken and the walls are watersoaked. The walls are cracked and the addition is drawn away from the original building. One may see daylight through these cracks. The walls are not held together with rods. They are dangerous. There are seven rooms in the building, four on the lower floor and three on the upper. There is no basement to the building.

Heating.—The building is heated by means of stoves in the several rooms.

Ventilation.—There is no means of ventilation except by the windows, doors and cracks in the walls.

Hallways.—There are three hallways. Two are in the original building, one above and one below. They are each twelve feet wide and run

through the center of the building from east to west. The third is on the lower floor of the addition and runs north from the east end of the main hall. It is eight feet wide. These halls serve as cloakrooms.

Stairways.—Two winding stairs run from the lower main hall to the upper main hall. These stairways are only three feet wide and would be very dangerous in case of fire.

Floors.—The floors of the building are old, cracked, dirty and cannot be made sanitary. They are also weak and the upper ones are dangerously shaky and sagged.

Primary Room.—The room is located on the lower floor, in the south part of the addition. It is 24x34 feet in area. It is lighted by five windows, each 3 feet by 7 feet. Three are in the south wall and two in the east wall. There are fifty-nine pupils enrolled in this room. This gives an air space of about 150 cubic feet to each pupil, and with a big stove in the room and no means of ventilation, presents a very bad condition of affairs, which is duplicated in other rooms of the building.

Seventh and Eighth Grade Room.—This room is located on the lower floor in the north part of the addition. It is 23 feet by 34 feet in area. It is lighted by five windows; three are in the north wall and two in the east wall. There are forty pupils enrolled in this room.

Chapel.—The chapel is located just above the primary and eighth grade room and hall of the addition. It is 42 feet by 48 feet in area. It is lighted by eleven windows, each 3 feet by 7 feet. Two are in the south wall, four in the east wall and one in the west wall. The floor is unstable. The walls are badly cracked and admit rays of light. The ceiling is cracked and sagged. It is supported by three wooden pillars along the center of the room and running up from the floor. This part of the building is absolutely dangerous.

Third, Fourth, Fifth and Sixth Grade Room.—This room is located on the lower floor of the original building in the south end. It is 24 feet by 38 feet in area. It is lighted by five windows, each 3 feet by 7 feet. Three are in the south wall and two are in the east wall. Sixty pupils are enrolled in this room. The room just above this one is a duplicate of it, and is used as a recitation and laboratory room for the high school pupils.

Second Grade Room.—This room is located on the second floor of the original building, in the north end. It is 24 feet by 38 feet in area. It is lighted by five windows, each 3 feet by 7 feet. Three are in the north wall and two in the west wall. Fifty-two pupils are enrolled in this room.

High School Room.—This is located just above the second grade room and is a duplicate of it. Forty-four pupils are enrolled in this room.

Remarks.—This is one of the richest communities in Indiana. They are amply able to erect a modern building. The school board is willing to erect a new building. The present building is totally unfit for school purposes.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the school house at Kirklin, Clinton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary so as to threaten the health and lives of the pupils, therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE, DISTRICT No. 10, SHARPSVILLE,
TIPTON COUNTY, INDIANA, MAY 8, 1907.

Site.—The school is located in the south part of the town. The plat of ground contains eight town lots. It is well drained and sodded and there is a good supply of trees.

Approaches.—The approaches are by gravel walks. There are no walks to the outhouses. The outhouses are worn and dirty.

Building.—The building is a two-story brick, with a stone foundation and a slate roof. The first floor is about two and one-half feet above the ground surface. There is no basement under the building. The walls appear to be plumb and safe. The downspout at the southeast corner of the building is broken and the walls at that point are watersoaked. The building faces the north and is a fair looking building.

Heating.—The building is heated by means of stoves in the several rooms. These stoves are each surrounded by a jacket.

Ventilation.—The building is ventilated by means of foul air ducts built in the chimneys at each side of the building and by means of fresh air pipes fitted in the window casements.

Floors.—The floors of the building are in fair condition.

Walls and Ceilings.—The walls and ceilings are in an unsanitary condition.

Hallways.—There are two hallways, one below and one above. The area of each is 14 feet by 15 feet. There are two cloakrooms, each 5 feet by 15 feet, on each side of each hall.

Stairways.—The stairway starts within three feet of the main entrance to the building. It is five feet wide and runs up the center of the lower hall to a landing two and one-half feet wide, and from this landing a winding stairs two and one-half feet wide, leads on each side to the hall above. These stairs would be regular death traps in case of fire.

First and Second Grade Room.—This room is located on the first floor in the east end of the building. It is 26 feet by 36 feet in area. It is lighted by seven windows, each 3 feet by 8 feet. One is in the north wall, four in the east wall and two in the south wall. Fifty-one pupils are enrolled in this room.

Third, Fourth and Fifth Grades Room.—This room is located on the lower floor in the west end of the building. It is 26 feet by 36 feet in area.

It is lighted by seven windows, each 3 feet by 7 feet. One is in the north wall, four in the west wall and two in the south wall. There are fifty-six pupils enrolled in this room.

Sixth, Seventh and Eighth Grades Room.—This room is located on the upper floor, in the west end of the building. It is 26 feet by 25½ feet in area. It is lighted by four windows, each 3 feet by 8 feet. One is in the north wall and three in the west wall.

Recitation Room.—This room is on the same floor and just south of the one just described, and was formerly a part of it. It is 10 feet by 26 feet in area. It is lighted by three windows, each 3 feet by 8 feet. One is in the west wall and two are in the south wall.

High School Room.—This room is located on the upper floor, in the east end of the building. It is 26 feet by 36 feet in area. It is lighted by seven windows, each 3 feet by 8 feet. Two are in the south wall, four in the west wall, and one in the north wall. Forty-three pupils are enrolled in this room.

Remarks.—This building was condemned one or two years ago by the Board, but permission was given to carry on school in it after some suggestions of the Board had been carried out. This building can, with some little expense, be made very suitable for school purposes.

Recommendations.—It is respectfully recommended that the building be condemned unless the trustees comply with the following suggestions and any others the Board may see fit to make.

An approved system of heating and ventilating should be installed. The building is in such condition that this can be done without great difficulty or outlay.

The hallways, cloakrooms and stairway should be remodeled so as to provide for two wide stairways and ample means of exit. The partitions in this part are of wood and this work can be done at a cost not to exceed two hundred dollars.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Sharpsville, Tipton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOL HOUSE AT NEW BRUNSWICK, HARRISON
TOWNSHIP, BOONE COUNTY, INDIANA, DISTRICT No. 4,
MAY 9, 1907.

Site.—This school is located near a cross roads. The plat contains about one acre. The yard is sodded. There are no approaches except a few boards from the front of the building to the road.

Building.—The building is a one-story brick containing one room. Its walls are cracked and dangerous. Its area is 24 feet by 32 feet. It is lighted by six windows, three in the east wall and three in the west wall. Each of the windows are 3 feet by 7 feet.

Heating.—The room is heated by two large stoves, one on each side.

Ventilation.—The windows and doors are the only means of ventilation.

Floor.—The floor is rough, splintered and dirty.

Walls.—The walls are rough, dirty and dreary looking.

Ceiling.—The ceiling is patched, dirty and low.

Remarks.—The room seats fifty pupils. The desks are old double ones. It is a dangerous and unsanitary place for school purposes. Many barns in the neighborhood would answer the purpose better.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st. 1907, that the schoolhouse at New Brunswick, Harrison Township, Boone County, Indiana, District No. 4, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907. shall be promptly prosecuted as by the statutes provided.

— **SANITARY SURVEY OF SCHOOLHOUSE AT ROLL, IND., MAY 12, 1907.**

(By Dr. W. N. Cronin, Health Officer, Blackford County.)

Location.—The schoolhouse at Roll, Ind., is in Blackford County, Washington Township, and known as District No. 2. Mr. Isaac R. Harold, Trustee. Address, Roll, Ind.

Site.—The site is dry, covers about one acre; there is one four-inch tile drain and no shade. This site is unobjectionable.

Building.—The school building was built in 1893; it is brick, one story, two rooms, stone foundation, no basement. The walls on two sides are crumbling at one corner, downspout broken, leaks and makes walls damp. Both rooms are heated by stoves and the only ventilation is by windows and

doors; both rooms are wrongly lighted. In one room the children look into the light and in the other the teacher looks into the light. Hooks are fastened in the walls of the cold hall for disposal of wraps. Every school session the children have coughs, colds and catarrhs. Eye strain has existed in one or two instances.

Recommendations.—It is recommended that this schoolhouse be condemned as unfit for school purposes.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health that the schoolhouse at Roll, Washington Township, District No. 2, Blackford County, Indiana, is old, dilapidated, has damp walls, is insufficiently ventilated, improperly lighted, improperly and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT MONROVIA, MORGAN COUNTY, INDIANA, MAY 13, 1907.

Site.—The school is located in the south part of the town. The plat contains eight town lots. It is high and well drained. The yard is of gravel and sod. The water supply is from a driven well, located in the front of the plat. The site for school purposes is good.

Approaches.—There are gravel walks leading to the building, but there are no walks to the outhouses.

Outhouses. The outhouses are old, worn, filthy and unsanitary. They afford no privacy for the pupils.

Building.—The building is a two-story brick, containing six rooms. It has a brick foundation and a tin roof. The two west rooms are an addition to the original building. This part has settled, and where it is joined on to the original building there are cracks. However, there seems to be no danger of the building collapsing. The various walls are stayed by iron or steel rods running to the opposite walls.

The downspouts are broken and the walls are watersoaked. Water runs from these downspouts under the floors. There is no basement under the building. The walls inside show evidence of "sweating" and dampness.

Heating.—The respective rooms are heated by large stoves.

Ventilation.—There are no means of ventilation except by the windows and doors.

Hallways.—There are two entrance hallways on the lower floor, one 12 feet by 18 feet at the front of the building, and one 8 feet wide running between the original building and the addition. On the upper floor is an

upper hall corresponding to the lower front hall, a hall corresponding to the lower hall connecting the original building and addition, and also a hall eight feet wide running through the center of the original building and connecting these two halls.

Stairways.—There are two winding stairways leading from each side of the lower front entrance hall to the upper. These stairways are very steep and are only two and a half feet wide. They would be very dangerous in case of fire.

General Conditions.—The floors, walls and ceilings are in bad condition, being dirty and unsanitary. Paper and plastering is loose in places. The floors are rough and uneven.

Primary Room 1 and 2.—This room is located in the west part of the building, being on the lower floor of the addition. It is 25 feet by 26 feet in area. It is lighted by eight windows, each 3 feet by 7 feet. There are two windows in the west wall and three in each of the north and south walls. A large wooden pillar in the center of the room runs from the floor to support the ceiling. There are thirty-nine pupils in this room.

Seventh and Eighth Grade Room.—This room is located just above the primary room and is a duplicate of it, except the wooden pillar in the center. There are thirty-four pupils in this room.

Fifth and Sixth Grade Room.—This room is located on the lower floor in the south part of the original building. Its area is 26 feet by 31 feet. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the east, south and west walls respectively. A large wooden pillar in the center of the room runs from the floor to support the ceiling and upper floor. There are thirty-five pupils in this room.

Third and Fourth Grade Room.—This room is located on the lower floor in the north part of the original building. It is 26 feet by 31 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the west, north and east walls, respectively. There are twenty-five pupils in this room.

First and Second Year High School Room.—This room is located on the upper floor in the south part of the original building. It is 26 feet by 27 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the east, south and west walls, respectively. There are twenty-two pupils in this room.

Third and Fourth Year High School Room.—This room is located on the upper floor in the north part of the original building. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the east, north and west walls. There are thirty-nine pupils in this room.

Remarks.—The trustee and advisory board, while seeing the need of a new building, do not wish to build one now. They say the township has voted twenty thousand dollars for new roads and give this as their excuse for not wishing to build.

The indebtedness of the township is about three thousand dollars (\$3,000). Special levy is 30 cents; tuition levy, 25 cents; road levy is 10 cents cash and 15 cents labor.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Monrovia, Morgan County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT MORGANTOWN. MORGAN COUNTY, INDIANA, MAY 14, 1907.

Site.—The school is located in the south part of the town. The plat contains four lots. It is dry and well drained. The yard is graveled and sodded.

Approaches.—Gravel walks lead to the building. There are no walks to the outhouses.

Outhouses.—The outhouses are worn, filthy and unsanitary. No privacy is afforded.

Building.—The building is a two-story brick, containing four rooms and an upper and lower entrance hall. The foundation is of brick with a layer of stone at the ground surface. The roof is of slate. There is no basement to the building. The downspouts are broken and the walls are water-soaked. The west wall is badly cracked from top to bottom and is in a dangerous condition.

Heating.—The rooms of the building are heated by stoves placed in the rear of the respective rooms.

Ventilation.—There are no means of ventilation, except by the windows and doors.

Hallways.—There are two entrance halls, one on the lower and on the upper floor. Each hall is eight feet wide and thirty-eight feet long.

Stairways.—There are two stairways, each three and one-half feet wide, leading from the lower to the upper floor.

General Conditions.—The floors, walls and ceilings of the building are in a bad state of repair and are dirty and unsanitary. Patches of plastering are missing. The rooms are separated on each floor by wooden partitions and in the upper are sliding doors.

Primary Room 1 and 2.—This room is located in the lower north part of the building. It is 19 feet by 49 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Four of them are in the north wall and one is in the west wall. There are forty-six pupils in this room.

Intermediate Room 3, 4 and 5.—This room is located on the lower floor in the south part of the building. It is 19 feet by 49 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Four are in the south wall and one is in the west wall. There are fifty-four pupils in this room.

Sixth and Seventh Grade.—These pupils are taught in an old church building located a short distance from the schoolhouse.

Eighth Grade Room.—This room is located just above the intermediate room and is a duplicate of it. There are forty pupils in this room.

High School Room.—This room is located just above the primary room and is a duplicate of it. Thirty pupils are enrolled in this room.

Summary.—The building is dangerous to life and its unsanitary condition is a menace to health. The rooms are overcrowded, poorly lighted, heated and ventilated.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Morgantown, Morgan County, Indiana, is old, dilapidated, insufficiently ventilated, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT VEEDERSBURG, FOUNTAIN COUNTY, INDIANA, MAY 18, 1907.

Site.—This school is situated in the north part of the town. The plat contains about four town lots. It is high and well drained. The playground is of gravel and sod. The site is a good one for school purposes.

Building.—The building is a very old wooden structure, with a foundation partly of brick and partly of stone. It has a shingle roof. It is a two-story building. Only the lower part containing two rooms is used for school purposes. There is what is called a basement under the building. This basement consists of an irregular hole, in which a furnace was at one time installed. The "basement" is dirty and foul smelling, and resembles a trash dump. Water stands in this hole most of the time, as there is no drain from it. The condition of the "basement" is a menace to the health of the pupils. There is no ceiling to the basement and so the floors of the rooms must be very cold in the cold weather.

Heating.—The rooms are heated, or aimed to be, by stoves.

Ventilation.—There are no means of ventilation except by the windows.

Fifth Grade Room.—This room is located in the east part of the lower

story. It is 23 feet by 31 feet in area. It is lighted by four windows, each $2\frac{1}{2}$ feet by 8 feet. One window is in the south wall, one in the north wall and two are in the east wall. The walls, floors and ceilings are in bad condition, being damaged and dirty. The room is very crowded, containing fifty pupils.

Sixth Grade Room.—This room is located in the lower part of the building and on the west side. It is 23 feet by 31 feet in area. It is lighted by four windows, each $2\frac{1}{2}$ feet by 8 feet. One is in the south wall, one is in the north wall and two are in the west wall. There are fifty-one pupils in this room. The walls, floor and ceiling are in bad repair.

Entrance Hall.—The entrance hall is 19 feet by 13 feet in area. Most of its space is taken up by badly constructed "system" of stairways.

Upper Floor.—This is not used for school purposes, but for a band hall.

Remarks.—Physicians state that the pupils of this school were especially afflicted with sickness of various kinds during the past year. School authorities assert that the standard of the pupils is below par and attribute it entirely to the unsanitary condition of the building.

Recommendations.—It is respectfully and strongly recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Veedersburg, Fountain County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT FILLMORE, PUTNAM COUNTY, INDIANA, MAY 20, 1907.

Site.—The school is located in the south part of the town. The plat contains an acre of ground. It is well sodded and graveled. The yard is well drained. The water supply is from a driven well. The site is a good one for school purposes.

Approaches.—Board walks lead from the gravel road to the building. There are no walks to the outhouses.

Building.—The building is a two-story frame, with a stone foundation and a shingle roof, which is in a leaky condition. The weather boarding is cracked and broken in many places. The building faces the west. It contains two rooms, an upper and lower, and an upper and lower entrance

hall. The building was erected in 1883. It is not a substantial structure and would be in danger of collapse in high winds.

Heating.—The building is heated by a stove in each of the two rooms.

Ventilation.—There are no means of ventilation except by the doors and windows.

Hallways.—The hallways are each 11 feet by 13 feet in area. A stairway two and a half feet wide leads straight up from the lower hall and ends at the door opening into the upper room. A board partition separates the stairway from the rest of the halls. These stairs are very steep and would be very dangerous in case of fire.

Lower Room.—This room is 21 feet by 31 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Two are in each of the north, west, and south walls, respectively.

This room is occupied by the fourth, fifth, sixth and seventh grades. There are thirty pupils in the room. The floors are rough and dirty. The walls and ceilings are unclean and patches of plastering are absent.

Upper Room.—This room is a counterpart of the lower room in all respects except that the floor is shaky and dangerous. This room is occupied by the eighth grade and high school. There are forty pupils enrolled.

First, Second and Third Grades.—These pupils are quartered in a small room in the rear of an implement storehouse.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session, at Indianapolis, May 21st, 1907, that the schoolhouse at Fillmore, Putnam County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes, and shall not be used for school purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

Third Regular Meeting.

REGULAR MEETING INDIANA STATE BOARD OF HEALTH.

JULY 12, 1907.

AFFAIRS CONSIDERED OF THE FISCAL QUARTER ENDING APRIL 30TH,
AND THE CALENDAR QUARTER ENDING JUNE 30TH, 1907.

Called to order by President Tucker at 2 p. m. Present: Drs. Tucker, McCoy, Davis, Wishard, Hurty.

Minutes of the last regular meeting and of the special meeting of the 21st read and approved.

REPORT OF SECRETARY FOR CALENDAR QUARTER ENDING JUNE 30, 1907.

The orders of the Board in regard to the schoolhouses condemned at the last regular meeting and the special meeting held May 21st, were duly executed. The proclamations, as adopted, were posted and in every instance new and sanitary schoolhouses will be built, but it seems proper to record that in two instances there have been vigorous protests by those who thought new buildings were not needed.

HEALTH OF THE STATE DURING THE QUARTER.

The statistical tables show the health of the quarter to have been about $2\frac{1}{2}$ per cent. better than in the corresponding period last year. However, measles has prevailed to an extraordinary degree, epidemics being reported from all parts of the state. In Indianapolis five schools have been closed and over 3,000 cases reported. Scarlet fever has also been reported extensively, but the cases have usually been mild. The situation in regard to smallpox and typhoid fever is shown by the following tables:

SMALLPOX COMPARISON FOR SECOND CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
April, 1906.....	97	.....	11
April, 1907.....	91	1	20
May, 1906.....	112	.....	14
May, 1907.....	149	1	23
June, 1906.....	63	.....	8
June, 1907.....	193	1	31
Total, 1906.....	272	.....	33
Total, 1907.....	433	3	74

TYPHOID FEVER COMPARISON FOR SECOND CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
April, 1906.....	211	34	62
April, 1907.....	280	38	37
May, 1906.....	94	40	3
May, 1907.....	102	32	32
June, 1906.....	153	29	37
June, 1907.....	142	24	36
Total, 1906.....	305	103	92
Total, 1907.....	524	94	105

VISITS AND INSPECTIONS.

Visits were made as follows:

- May 4th—Washington, D. C. To attend National Tuberculosis Association.
- May 25th—Bloomington, city sanitation.
- May 28th—Fishers, schoolhouse inspection.
- June 3d—Kennard, schoolhouse inspection.
- June 4th—Huntington, to attend court on subpoena.
- June 17th—Evansville, city sanitation.
- June 27th—Spencer, summoned by grand jury.
- June 29th—Valparaiso, city sanitation and public health lectures.
- Full accounts of these visits are appended.

Washington, May 4th—On this date the delegates went to Washington, according to the permission of the Board, to attend the third annual meeting of the National Association for the Study and Prevention of Tuberculosis. The sessions extended over three days. Monday, May 6th, the Association was called to order in general meeting. There was an address by the President, Dr. Herman H. Biggs, followed by a report on the International Congress of Tuberculosis, by Dr. Lawrence F. Flick. In the afternoon the Associa-

tion divided into sections, namely: Section of Tuberculosis in Children; Sociological Section; Clinical and Climatological Section; Pathological and Bacteriological Section; Surgical Section.

The secretary attended the section on Tuberculosis in Children, of which Dr. Thos. M. Rotch, of Boston, was chairman. Four papers were read and discussed. On Tuesday morning, May 7th, I attended the Pathological and Bacteriological Section, of which Dr. F. F. Westbrook was chairman. Eight papers were read in this section. On Tuesday afternoon the entire Association was received by President Roosevelt, and following the reception we attended an address by Dr. Osler. On Wednesday, May 8th, I attended the Clinical and Climatological Section, of which Dr. George Dock, of Ann Arbor, was chairman. Four papers were read before this section and three reports were presented. The report of the committee on medication in tuberculosis was read, and the discussion when summed up amounted to the conclusion that medication was of little or no value. The report itself, and quite all the speakers, contended that very little medication for symptoms not caused by the tubercular condition was all that should be considered. The report of the committee on mixed infection and its discussion was most interesting and enlightening, and the paper entitled "The Varieties of Tuberculosis," by Dr. Woods Hutchinson, of New York, was striking.

I feel that I received much benefit and much enlightenment and surely acquired more enthusiasm on account of this visit to Washington.

Bloomington, May 25th.—On this date I visited Bloomington to confer with the authorities in regard to sanitary conditions in that city. I arrived about 11 o'clock and immediately met with the mayor and public health committee of the council. Bloomington's water supply and sewerage system, already constructed, and the sewers yet needed, were discussed and plans examined. I recommended the passage of a garbage ordinance, requiring that all householders shall keep their garbage in tightly-covered metal containers and that the same should be collected at least three times a week in the summer time and at least once a week in the winter time. For disposal of the garbage I recommended cremation, and lacking this, that the same be fed to swine at some distance from the city, or buried in a convenient ravine.

Fishers, May 28th.—I went to Fishers, a station on the Lake Erie & Western Railroad, in Hamilton County, in order to make a survey

of the schoolhouse at that place. This survey was presented at our last special session and acted upon.

Kennard, June 3d.—I visited Kennard on account of a schoolhouse, which was found very unsanitary. There was no opposition to building a new one, and, the advisory board and trustees being present, they then and there agreed that a new one should be constructed. No report, therefore, is required and no action by this Board.

Huntington, June 4th.—I went to Huntington in obedience to a subpoena from the circuit court, which was to try the cases of the schoolhouse condemnations at Monument City and Rock Creek Township. I was not called to testify, because the court dismissed the case on account of faulty procedure.

Evansville, June 17th.—At Evansville I consulted with the city engineer and committee from the council in regard to a sewer known as the Pennsylvania sewer, which was projected by the city government and which was opposed by certain citizens. This sewer, about two miles in length, was intended to drain a very wet region to the northeast of the city, and would empty into Bee Slough, a sluggish slough above the town. The objectors claimed that the sewer would become stagnant in Bee Slough and as the mouth of the same opened into the Ohio river about a quarter of a mile below the intake of the waterworks, that, therefore, the public water supply would be threatened. The plans of the engineer and all facts showed that for five years at least no sewage would be introduced into the sewer, and that it would only carry drainage from the land. As this drainage was exactly of the same composition as the water in Bee Slough, no objections could hold against it at the present time. It was, therefore, proposed to empty the sewer into the slough and leave to the future its extension down to the river. For if the extension were ordered at this time, it would be impossible to build the sewer, inasmuch as they could not carry the expense. A conference was held with citizens in the council chamber and it was finally agreed not to oppose the construction of the sewer, as it seemed to be the best that could be done.

Spencer, June 27th.—In obedience to a request by telephone from the judge of Owen County and the foreman of the grand jury, I went to Spencer. Upon arrival, the foreman of the grand jury, deputy prosecutor and a second member of the grand jury, went with me to visit three slaughter houses. It was the desire of the

grand jury to have my testimony in regard to these places. We found all three slaughter houses in horrible condition. It seems unnecessary to describe them, for the word "horrible" covers them completely. On return to Spencer, I was duly sworn and testified in detail concerning these abominable places to the grand jury. Being released, I was invited to take a ride with Hon. Temple G. Pearson, member of the legislature. He wished to show me a farm which he thought would be a good place for locating the State Tuberculosis Hospital. He was well aware that the State Board of Health has nothing to do with purchasing a site, but desired me to see it. I enjoyed riding over a beautiful tract of land, owned by Mr. Poncheon. Its area was about 900 acres. It was rolling and had many beautiful views of White river in the distance. I have since learned that the tuberculosis commission has viewed this land.

Valparaiso, June 29th.—Upon invitation from the Civic Association of Valparaiso and the mayor, Mr. Williams, I visited the said city, to deliver lectures and to consult with the local authorities in regard to sanitary affairs. Upon arrival, I was met at the station by the mayor and the local health officer, Dr. Evans. We immediately visited the waterworks and examined the new filtration plant, which is being constructed. The plans for said plant and everything pertaining thereto, were quite perfect, and after thorough study, I gave official approval of the same. Valparaiso is to be congratulated that very soon the city will have an abundant supply of soft and pure filtered water.

Saturday evening, June 30th, I delivered a lecture in the Christian Church, before a large audience, filling the entire auditorium, upon the subject of Food and Drug Adulteration, reviewing what the State Board of Health was doing to curb the evil. On Sunday evening, July 1st, I delivered a lecture in the Methodist Church upon "The Cause, Prevention and Cure of Tuberculosis." The audience filled the entire auditorium. On Monday morning, July 2d, I addressed 1,500 students of the Valparaiso College, especially assembled, upon "Personal Hygiene." In the afternoon I returned home.

I must contrast this visit and my reception at a former one made six years ago. At the time of the first visit, smallpox prevailed in Valparaiso. Not one of the city physicians had been able to diagnose the disease, but Professor Kinsey, vice-president of the Valparaiso College, had arrived at a correct diagnosis. The

general attitude of the citizens was against any interference on the part of the State Board of Health, and some of them indignantly repelled our efforts to relieve the situation. In a word, I found myself very unpopular and was very unkindly received. Now, what a change, as is shown by the fact that the mayor and other officials met your representative at the station, and showed him every honor and attention, and the people came out in hundreds to hear the Gospel of Hygiene.

CORRESPONDENCE WITH THE ATTORNEY-GENERAL.

The following correspondence explains itself:

Hon. Jas. Bingham, Attorney-General State of Indiana:

Dear Sir—The State Board of Health respectfully asks your opinion in regard to the following point:

The appropriation for this Board, page 680, Acts 1907, is in two parts. The first says:

“ * * * * for other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of ten thousand dollars.”

The second says:

“For maintenance of laboratory of hygiene, purchase of food and drug samples, salaries of employes, transportation and hotel expenses of those necessary to conduct inspections, collect samples and attend prosecutions and for incidental expenses, fourteen thousand dollars.”

Some of the ground covered by the last quoted clause is also covered by the appropriation clause in the pure food law, page 158, Acts 1907.

Question 1. Will it be lawful to use any of the \$14,000 for pure food work, if the appropriation of the pure food act runs out, and it is to spare?

It is our positive information that the \$14,000 in the Ways and Means Act was an amendment by Senator A. J. Bowser, and that it applied to the first part and not to the second part of Section 7, and the printed law should have said fourteen instead of ten in line 14 of the Board of Health item.

In other words, by clerical error, the fourteen has been put in the wrong place. We understand there is no way to correct this “legislation by clerks,” but we wish to ask—

In view of the known fact that the extra \$4,000 was given, after long argument in the Senate, for stream pollution and for extending disease prevention work, would it be lawful to use it for such purposes? Or, shall the purpose and intent of the law-making power be thwarted by the error of a clerk?

Respectfully,

Secretary.

By order of the State Board of Health,

State of Indiana, Indianapolis,

May 8, 1907.

Dr. J. N. Hurty, Secretary of State Board of Health, Indianapolis, Indiana :

Dear Sir—Your communication, on behalf of the State Board of Health, received, stating that

“The appropriation for this Board, page 680, Acts 1907, is in two parts. The first says “ * * * for other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of ten thousand dollars.”

“The second says: ‘For maintenance of laboratory of hygiene, purchase of food and drug samples, salaries of employes, transportation and hotel expenses of those necessary to conduct inspections, collect samples and attend prosecutions, and for incidental expenses, fourteen thousand dollars.’”

You ask: “Will it be lawful to use any of the \$14,000.00 for pure food work, if the appropriation of the pure food act runs out, and it is to spare?”

Section 7 of the pure foods and drugs act (Acts 1907, p. 158) makes it the duty of the State Board of Health to enforce the laws of the State governing food and drug adulteration, and designates the chemist of such Board as a State food and drug commissioner; and \$15,000 is appropriated annually by section 8 of the act, “To be expended by the State Board of Health for the purpose of meeting expenses incurred in the enforcement of this act, including the salaries of the State food and drug commissioner, chemists, inspectors and clerks, the cost of collection of samples, purchase of laboratory supplies, aid in prosecuting offenders against this act, publication and distribution of bulletins, and other expenses incident to the enforcement of this law.”

The appropriation act of 1907 (Acts 1907, p. 680) appropriates certain money to pay the salaries of the secretary of the State Board of Health and other officers, and to pay the expenses of the members of the Board in attending the quarterly meetings of the Board, and “for other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of ten thousand dollars”; and again, “for maintenance of laboratory of hygiene, purchase of food and drug samples, salaries of employes, transportation and hotel expenses of those necessary to conduct inspections, collect samples and attend prosecutions, and for the incidental expenses, fourteen thousand dollars.”

Appropriations can only be used for the purposes intended by the legislature, and the intention of that body is to be gathered from the language used by it. This intention seems to have been clearly expressed and was to the effect that fourteen thousand dollars was appropriated for maintenance of laboratory of hygiene, etc., and it is my opinion that no part of it can be used by your department to prevent the pollution of streams or the spread of contagious and infectious diseases.

You state that “by clerical error, the fourteen has been put in the wrong place,” that it should have been in place of “ten” in the forepart of the act, and that the “ten” should have been in place of the word “four-

teen" in the latter part of the act. Whether there was a mistake in the enrollment or printing of the bill can make no difference now, since our courts hold—and correctly so, I think—that where a statute is duly authenticated by the presiding officers of the legislature, the court will not inquire as to the regularity of the proceedings before that time.

Evans v. Browne, 30 Ind. 514.

Since section 8 of the acts of 1907 (Acts 1907, p. 158), known as the pure foods and drugs act, appropriates \$15,000 to be used by your department for some of the same purposes for which the \$14,000 appropriation above shown is to be used, it is my opinion should said \$15,000 so appropriated be inadequate for the purposes intended, such portion of the \$14,000 appropriation as you may have to spare, if any, may be lawfully used by your department for pure food work as contemplated by the second appropriation for the State Board of Health (Acts 1907, p. 680).

I have the honor to be,

Yours very truly,

JAMES BINGHAM,
Attorney-General.

NOTICE CONCERNING CLEANLY HANDLING OF FOODS AND CONFECTIONS.

The rule of the Board passed April 10th, 1907, regarding the cleanly handling of foods, was promulgated by sending the following notice to persons interested in all parts of the state:

NOTICE TO MANUFACTURERS, DEALERS, VENDERS AND OTHER PERSONS ENGAGED IN THE SALE OF FOOD.

In accordance with a rule of the State Board of Health, made by them on the 10th day of April, 1907, relative to the sale of unprotected food products, and reading as follows:

Rule.—"No manufacturer, dealer, vender or other person shall expose for sale or exchange, or sell any bread, pastry, confectionery, shelled nuts, or other food so prepared that it is ready for consumption, unless such food is properly protected from insects, dust, dirt and other foreign or unwholesome material by suitable coverings."

Therefore, you are hereby notified to refrain from selling bread, pastry, confectionery, shelled nuts or other food prepared for consumption unless such food is properly protected from dust, dirt and other foreign or unwholesome material by suitable coverings of glass, wood or metal.

The violation of this order is punishable by a fine of ten dollars (\$10.00).

H. E. BARNARD,
State Food and Drug Commissioner.

SECRETARY'S REPORT FOR THE CALENDAR QUARTER ENDING
JUNE 30TH.

Kirklin Schoolhouse—A delegation of three citizens from Kirklin was present to request that the condemnation of the Kirklin schoolhouse be reconsidered, and that permission be given to make repairs. It was represented it would be impossible to build a new building by the time for opening school this fall, and also that the present building could be repaired and almost all sanitary requirements be met.

After argument was heard and many questions asked by different members of the Board, the following motion was made by Dr. Davis:

Moved, That the secretary make a second sanitary survey of the Kirklin schoolhouse, inquire into all the facts, and, in accordance with his judgment, act for and in the name of the Board. Carried.

Colfax Schoolhouse—Mr. Burr Bailey, trustee of Berry township, Clinton County, in regard to the Colfax schoolhouse, recently condemned, said in a letter to the secretary that: "A new site had been purchased, that the contract for a new building had been let, but it could not be completed before January 1st. He, therefore, requested a permit be given to use the old building until January 1st, 1907, or until the new building could be occupied. After discussion, Dr. Davis moved a reconsideration of the proclamation of condemnation. Carried.

Dr. Davis then moved the adoption of the following:

PROCLAMATION OF AMENDMENT.

The Indiana State Board of Health, in regular session, July 12, 1907, amends the proclamation of condemnation of the Colfax, schoolhouse, adopted April 10, 1907, as follows, to wit:

The words "June 1st, 1907," the date after which the said proclamation forbids the use of the said schoolhouse for school purposes, are repealed, and the words, "January 1st, 1908," adopted.

Motion was unanimously adopted.

Ordered, The secretary shall duly serve the proclamation of amendment.

Orleans Schoolhouse—The following letter was read:

Orleans, Ind., June 7, 1907.

Dr. J. N. Hurty, Indianapolis, Ind.:

Dear Sir—At their meeting on June 6th, 1907, the Orleans School Board passed the following motion:

The Orleans School Board promises to provide blinds and baffle boards to all windows, and to build a sanitary school building by the beginning of the school year of 1908, if possible.

I will personally see that the blinds and baffle boards are put in according to your requirements, and that the teachers have proper instructions in regard to ventilation.

Trusting this will meet with your approval, I am,

Yours truly,

C. H. SHIRLEY,

Secretary.

After discussion and argument, Dr. McCoy moved a reconsideration of the proclamation of condemnation of the Orleans schoolhouse, adopted April 10th, 1907.

Carried.

Moved by Dr. McCoy that the following proclamation of amendment be adopted:

PROCLAMATION OF AMENDMENT TO PROCLAMATION OF CON-
DEMNATION OF THE SCHOOLHOUSE AT ORLEANS, IND.,
ADOPTED APRIL 10, 1907.

The Indiana State Board of Health, in regular session July 12th, 1907, amends the proclamation of condemnation of the schoolhouse at Orleans, adopted April 10th, 1907, as follows, to wit:

The words "June 1st, 1907," are stricken out, and the words June 1st, 1908, adopted.

Unanimously adopted.

SANITARY SURVEYS OF CERTAIN SCHOOLHOUSES AND ACTION TAKEN
THEREON.

BOONE COUNTY, IND., MARION TOWNSHIP, DISTRICTS 11, 12, 13,
F. M. JOHNS, TRUSTEE, SHERIDAN, R. R. No. 21.

EXPLANATION.

By G. R. Coffin.

June 13, 1907.

These are all one-room country school buildings. Districts seven and ten have been abandoned by the law, which requires a school with an average daily attendance of twelve or less to be abandoned. All of these schools are within one or two miles of Terhune, Ind. The trustee of the township, and a majority of the patrons of these schools desire to erect a

modern graded school building at Terhune. There is opposition to the procedure. The matter is in the courts, or was at the time of my visit. A majority of the patrons had voted to abandon these schools. The trustee had purchased ground upon which to erect a central building. He had issued bonds to cover the cost of the proposed building, and then an injunction suit had been filed against him and the advisory board. Their demurrer to the injunction proceeding was to be passed upon June 14th. The result is unknown to me.

DISTRICT ELEVEN.

Site.—This school is located about one and one-half miles north and west of Terhune, Ind. The plat contains one or two acres. The yard is well sodded.

Building.—The building is a one-room frame. It is 24 feet by 30 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Three are in the north and three are in the south wall. It is heated by a large stove in the center of the room. There are no means of ventilation except by the windows and doors. The walls and ceilings are unclean. The floor is rough and dirty. There are thirty pupils, comprising all grades, in this building. The means of heating, lighting and ventilating make the building unfit for school purposes.

DISTRICT TWELVE.

Site.—This school is located about one mile north and east of Terhune, Ind. The plat contains an acre of land. The grounds are well sodded. The water supply is from a driven well.

Building.—The building is a one-room brick. It is 24 feet by 32 feet in area. The foundation is bad at the northwest corner. A number of bricks are gone, leaving the walls in a dangerous condition. The building is lighted by six windows, each 3 feet by 7 feet. Three are in the east and three are in the west wall. The floor is dirty and unsanitary. The walls and ceilings are in fair condition. The building is heated by a large stove in the center of the room. There are no means of ventilation except by the windows and doors. This building is dangerous and unfit for school purposes. Thirty pupils are enrolled.

DISTRICT THIRTEEN.

Site.—The school is located about one-half mile south of Terhune, Ind. The plat contains an acre or two of ground. The yard is well sodded.

Building.—The building is a one-room brick building. It is 24 feet by 32 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Three windows are in the north wall and three are in the south wall. The plastering and paper is off the ceiling and walls in patches. The walls, ceiling and floor are absolutely filthy and unsanitary. Sixty pupils attend school in this filthy place. The room is heated by a stove in the center of the room. There are no means of ventilation, except by the doors and windows. Patrons say that the teacher has dismissed school during high winds on account of the swaying of the walls of the building. The building is unfit for school purposes.

Remarks.—Several citizens of these communities say that the opposi-

tion to a modern building comes mostly from people in the other end of the township and men who still own farms in the community but have moved to Lebanon to give their children proper school facilities.

Recommendations.—It is respectfully recommended that the above described buildings be condemned.

After full consideration of the survey, Dr. Davis moved the adoption of the following proclamations of condemnation of the schoolhouses of Districts Nos. 11, 12, 13, in Marion Township, Boone County, Ind.

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse known as District number eleven, in Marion Township, Boone County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse known as District number twelve, in Marion Township, Boone County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse known as District number thirteen, in Marion Township, Boone County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall

not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

SANITARY SURVEY OF SCHOOLHOUSE AT NEBRASKA, DISTRICT
No. 2, CAMPBELL TOWNSHIP, JENNINGS COUNTY, IND.

By D. R. Saunders.

June 11, 1907.

The following is a report of examination of schoolhouse and site in Campbell Township, Jennings County, District No. 2, Nebraska.

Size of lot about 120x200 feet. Flat, no drainage. Water stands at corners of house and different places in lot after rains.

The building is old, dilapidated, frame, two rooms, one above the other, 25x31 feet; building, faces south. Entrance door at southeast corner into vestibule six feet square, where stairway leads to upper room (door entering southwest corner), which is 25x25 feet. Has two windows on west and east side and north end. Teacher's desk at south end. Room contains twenty-three desks, large enough for two. Blackboard on south wall back of teacher's position. Lower room same size, windows the same as above. Contains twenty-three single seats, thirteen double seats. Each room has one castiron stove. Burns coal; stoves situated in center aisle about eight feet from north wall; use same flue. The stoves are not more than two feet from seats opposite, on center aisle.

The ceilings and walls of both rooms are broken, and the weatherboarding on lower story is broken off all around the house in places, and plastering off the inside. House has stone foundation, 18 inches up. Cloakroom on ground floor under stairway; entrance from schoolroom. Cloakroom for upper room, entrance from school room. These rooms are six feet wide, twenty-five long across end of building on upper story. The space is taken up by stairway on lower floor, so they use the space under stairway. The walls are broken so that you can see into cloakroom from outside. The windows all same size, twelve lights 10x16. Teacher's desk plain oak table, no seat but a soapbox.

Coal house, 10x20, in yard.

Closets, brick, one on each corner of lot back. No screens.

Approach to building not good. It has been graded some, but there are no sidewalks, street is not improved. Rains standing in gutter by side of street. Do not know of any sickness traceable to house. House is worn out and is certainly very unsanitary. Ventilation up through floor and side walls. Heating, the very poorest possible; water supply from well dug, 22 feet on lot, said to be good water.

The lot could be graded and be all right for school purposes; the building would have to be repaired to be fit for a stable.

After considering all the evidence, Dr. McCoy moved the adoption of the following proclamation:

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse at Nebraska, District No. 2, Campbell Township, Jennings County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

INSPECTION OF SCHOOLHOUSE AT AUGUSTA, PIKE COUNTY, IND.

By J. L. Anderson.

July 9, 1907.

Site.—One-fourth acre, high and dry, but not enough ground and unsuitable in surface condition.

Walks.—No walks of any kind. No well.

Water Closets.—Two, unsanitary in every way and absolutely abominable. No screens to them.

House.—Two-story frame, shingle roof, built about twenty-five years. On stone pillars with no underpinning, and has settled to west side, splitting roof at comb. Building faces south. Weatherboarding torn off badly around base, and split and warped all over house.

Hall.—6x22x10 feet, with a 3-foot box stairway in west end. Floor dirty, worn out and broken. Walls and ceiling wainscoted with tongued and grooved boards, and many of the boards loose and broken. Two windows, one on each side of entrance, light this hall. Used as a cloak and garbage room, from the looks and smell.

Lower Room.—22x30x10 feet. Wainscoted with boards same as hall.

Blackboards.—Simply painted with black paint on the boards. Light by six windows, 3x7 feet, two on each side and two in north end. Half the windows knocked out. Two wooden posts in center of room, supporting upper floor (which is sagging). Seats old and broken; floor worn, filthy, and apparently never been cleaned. Heated by "Cannon" stove; ventilation by windows and cracks in wainscoting. Enrollment, 55; average attendance, 45.

Stairway.—Three feet; reverse platform, broken at landing and dangerous.

Hall Above.—Same as below, except that the wainscoting was only as high as lower part of windows, and walls were plastered, but most of the plastering had been broken and fallen off.

Upper Room.—Same as lower room in size, but only an 8-foot ceiling. Wainscoting on sides to lower part of windows, and over head, walls plastered. Heated by "Cannonball" stove. Lighted by six windows, same as

below; and other conditions the same. Floor and whole building shakes when walked over. Enrollment, 40; average attendance, 35.

Besides this building the trustee had rented an old storeroom for the use of about seventy-five pupils that were unable to get into the schoolhouse. Whenever a storm comes up, or there is very cold weather, the school is dismissed on account of the dangerous condition of the schoolhouse.

It is unsanitary, filthy and dangerous. I recommend that it be condemned.

After considering the sanitary survey of the schoolhouse at Augusta, Pike County, Indiana, Dr. Wishard, moved the adoption of the following proclamation of condemnation:

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session, July 12, 1907, that the schoolhouse at Augusta, Pike County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

INSPECTION OF SCHOOLHOUSE AT BURNS CITY, MARTIN COUNTY, IND.

By J. L. Anderson.

July 8, 1907.

Site.—Southeast part of village and high and sloping to north. About one acre of ground in lot. No walks of any kind to or on lot. No well. Have to carry water from private wells.

Outhouses.—Two water closets and coal house. Water closets have no dug pits and no screens, and are in filthy condition; about 100 feet north of school building.

Schoolhouse.—A two-story, shingle-roofed, frame building of two rooms, built about twenty or twenty-five years ago; erected on stone pillars about one foot from ground. No underpinning; siding split and warped from bottom to top and torn off in many places. Faces south, with porch and halls at west end. Hall, 7x21x11 feet, used as cloakroom. No plastering used in the house. The hall was dirty and boards torn off the wall in several places, exposing the studding.

Primary Room.—The primary room on first floor is 24x36x11 feet; lighted by eight windows, 3x7 feet. Four are on the north and four on the south side of room. Windows are screened on outside by coarse wire.

Walls and ceilings are sealed by boards tongued and grooved. There are two wooden posts in this room to support the floor above. When the building was erected the space between the ceiling of the lower room and floor of the upper room had been filled in with sawdust, and on account of the boards drawing apart it was found necessary to put on a new ceiling in lower room two years ago.

Blackboards.—The blackboards are black oilcloth nailed to wall at east end of room. Room heated by "Cannonball" stove, placed in west end of room.

Seats.—The seats are in bad condition, broken, dirty and not enough for number of pupils.

Floor.—The floor is in fair condition, but has never been scrubbed since it was put in.

Ventilation.—There is no ventilation, except by windows and cracks between the boards used for inside sealing. Enrollment, 60; average attendance, 50.

Upper Room.—Entrance by a three-foot box stairway from hall below.

Hall.—Same size and conditions as below, except that more boards were torn off the walls and only an eight-foot ceiling.

School Room.—Same conditions as in lower room, with the exceptions that the ceiling is only eight feet high; the blackboards are slate, the floor is badly worn, and instead of being tongued and grooved is simply plain boards nailed down side by side. The floor and building shake very perceptibly when walking over the room. Enrollment in this room, 50; average attendance about 40.

Coughs, colds, sore throats and pneumonia were prevalent last winter. I consider the building unsanitary, unsafe, and a menace to health.

Remarks.—I was met at the depot by Dr. Hays, who showed me over the school building, and introduced me to several of the citizens, who are very anxious to have a modern building that would be sanitary and with enough room for a high school.

School was dismissed several times last winter on account of cold weather, and the school is always dismissed in the event of a heavy storm, as the building has been considered unsafe for several years.

The township is out of debt and can put up a good building. I respectfully recommend that the building be condemned.

After considering the sanitary survey of the schoolhouse at Burns City, Indiana, Dr. Wishard moved the adoption of the following proclamation:

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session, July 12, 1907, that the schoolhouse at Burns City, Martin County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any town-

ship trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

Secretary's report accepted and ordered spread of record.

Ordered, The secretary shall be a delegate to represent the Board at the annual meeting of the American Public Health Association, to be held in Atlantic City, the first week in October, 1907, and that either Dr. Tucker or Dr. Wishard be a delegate, they to determine which shall act.

Ordered, That H. E. Barnard shall be a delegate to represent the Board at the annual meeting of National Association of Food Chemists, to be held July 12th to 17th, at Norfolk, Va.

SPECIAL MEETING.

September 12, 1907.

Called to order at 10:45 a. m. by President Tucker. Present: Drs. Tucker, Wishard, McCoy, Davis, Hurty.

KIRKLIN SCHOOLHOUSE.

A delegation of about twenty citizens of Kirklin, including the local school board, appeared before the Board and asked that the date of condemnation of the schoolhouse, condemned to take effect June 1st, 1907, be extended to June 1st, 1908.

Mr. Williams, chairman of the school board, stated the position of the petitioning citizens, and speeches supporting the request were made. Upon retirement of the visitors, the following order was adopted:

Ordered, The date of condemnation of the schoolhouse at Kirklin, Clinton County, Indiana, is extended from June 1st, 1907, to June 1st, 1908, and permission is given to use the said schoolhouse for school purposes for the school term of 1907 and 1908: Provided, The following improvements and sanitary regulations are made and adopted, to wit:

First: The roof must be repaired so as to prevent leaks, and the gutters and downspouts shall be properly repaired.

Second: Only the first floor or lower floor shall be used and the stairways leading to the second floor shall be boarded up.

Third: Where plaster has fallen off in the first story or lower rooms, the same shall be replaced.

Fourth: All windows of the lower rooms shall be put in movable condition, so they can be raised and lowered easily for ventilation purposes.

Fifth: The interior walls of the lower rooms shall be cleaned, white-washed or painted.

Sixth: The floors, desks, windows and window sills of the lower rooms shall be washed with soap and hot water.

Seventh: The teachers shall be instructed to carefully watch the pupils, and to send home at all times any child found to be in the least degree ill. The teachers shall be instructed, further, to flood the rooms with fresh, outside air at every recess.

Eighth: All of the above requirements shall be approved by the executive officer of the Board before school shall be held in the said Kirklin schoolhouse.

Ninth: It is expressly and clearly understood that the condemnation of the schoolhouse at Kirklin still stands, and that an extension of the date of the taking effect of said condemnation is herewith simply made to June 1st, 1908.

INSPECTION OF THE WHITCOMB SCHOOLHOUSE, DISTRICT No. 6,
MICHIGAN TOWNSHIP, CLINTON COUNTY; TRUSTEE, S. M.
PITTMAN, MICHIGANTOWN, INDIANA, R. F. D. No. 1.

By J. L. Anderson.

August 27th.—The approach to this building is by dirt road. The ground is high and dry, comprising about one acre in extent; a dug well, about twelve feet deep, with wooden pump, in the southwest corner. The water is surface water and not fit for use. There are two water closets, in the northeast and northwest corners, respectively, of the yard. There are no walks, no screens, and in very bad condition. No walks about the premises, whatever. The building, a one-room brick, shingle roof, size about 30x34 feet. This building was put up about thirty years ago. The woodwork all burned out and was rebuilt about sixteen years ago, without rebuilding the walls, but one-inch iron rods were put through both sides and both ends at the top of the wall to hold them together. The building has a stone foundation about twenty inches above the surface of the ground with three iron ventilators on each side of the building. There is a wooden platform, 6x10 feet, in front of door. The door is a five-panel with the two lower panels knocked out. The casing is loose, and could be easily knocked out of the opening. The stone doorsill is worn and loose. There is a round opening above the door into the garret about 18 inches across, but the front wall is cracked and bulged until the frame and light that were in this opening have fallen out, and is open to the weather. The belfry over the front door is slightly sagged to the east, the front wall is cracked from top of the door frame to the comb, and the roof has spread about 1½ inches at the corner. The southeast corner of front wall is cracked from three feet above the ground to the rod in the upper corner. The southwest corner of the front wall is cracked from the foundation to the upper rod. The front wall is bulged out about four inches. The walls upon the east and west sides are cracked from

the base to the bottom of the window sills and from the tops of the sills to the top of the wall, the bricks being loose on the upper sills. The wall in the north end of the building is cracked from base to eaves and bulged out. There are six windows $2\frac{1}{2} \times 7$ feet, three on the east and three on the west side. The walls are wainscoted to the base of the windows about $3\frac{1}{2}$ feet; the balance is plastered and painted a light blue. The ceiling is sagged about six inches in the center. Blackboards at north end are painted on the plaster. The floor is in fairly good condition, but not oiled. There was an opening by the stove which was originally intended to receive cold air, passing in around a jacket stove, but which has been closed and covered with a zinc cover. The room is heated by coal stove in the center of the room. There are ventilators on the east and west sides of wall near floor which were tightly closed. The plastering is broken at the south end of room. A part of it has loosened and fallen to the floor, and along the upper corner next to the wall has separated from the ceiling and pulled away.

There are 49 seats in the room, in poor condition. Enrollment at this building is 20 pupils; the average attendance about 15.

I would respectfully recommend that the building be condemned as unsanitary and dangerous. If it were not for the retaining rods at the upper part of the wall, in my opinion, the building would collapse at the first heavy wind, as both the front and back walls are in such condition they would naturally fall at very little pressure.

Remarks.—I was accompanied on this inspection by Dr. Byron Thorpe, health officer of Michigantown, and Mr. Crawford, a member of the town board of Michigantown, and while making the survey of the building there were a number of the patrons who came over and talked about the condition of the building. This schoolhouse is situated about three miles southeast of Michigantown, one mile of this distance being dirt road, two miles good gravel road, and the pupils could be easily transported to the Michigantown school building, where they would have good sanitary surroundings and better advantage in the way of education than they could possibly have at this building.

After consideration, the following was unanimously adopted:

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in session Sept. 12th, 1907, that the school building known as Whitcomb schoolhouse, District No. 6, Michigan Township, Clinton County, is unsanitary and unfit for keeping school therein; therefore, it is

Ordered, That said schoolhouse is herewith condemned for school purposes and that the same shall not be used for school purposes after November 1st, 1907; and it is further

Ordered, That the state health officer shall see to it that this condemnation is enforced by promptly prosecuting, in the name of the Indiana State Board of Health, any trustee or teacher or any person who may violate said condemnation.

FISHERS STATION SCHOOLHOUSE.

To the State Board of Health, Indianapolis, Ind. :

Gentlemen—We, the undersigned patrons of the public school, District No. 5, at Fishers Station, Delaware Township, Hamilton County, Indiana, do hereby ask permission to keep our school children from attending school in the old, unsanitary building, now proposed and provided by the township trustee of Delaware Township, as temporary quarters for holding school until the new school building is erected and completed, the said old buildings so provided being unhealthy and unsanitary in every respect, and unsafe, and will necessitate crowding, and we fear for the health and comfort of the children who are of school age, and who will attend school at the places provided, unless our petition is granted.

B. F. Castetter, Principal, R. R. 35.	J. H. Klepfer.
Newton Castetter.	J. M. Frazer.
Joseph Emery.	J. M. Arthur.
Chas. L. Dawson.	J. A. Young.
W. E. Seymour.	W. F. Humbles.
B. L. Frazier.	Ed. F. Conner.
Ora Frazer.	A. J. Crossley.
D. M. Cox.	I. D. Castetter.
Douglas Castetter.	

After consideration of the above, the same was ordered laid on the table.

RULES—WHISKY.

Mr. Barnard presented a set of rules concerning standards for whisky, defining whisky and governing the labeling of whisky. Mr. Leo Rappaport, attorney for the liquor interests of the state, was present and made an argument to the effect that action should be delayed because the U. S. authorities had not yet acted and because the U. S. Supreme Court would eventually have to rule upon the U. S. standards, which were essentially the same as those contemplated in the proposed rules. The argument was considered good and a further consideration of the matter was postponed until the next regular meeting, October 11th.

JAMESTOWN SCHOOLHOUSE.

Sept. 9, 1907.

Indiana State Board of Health, Indianapolis, Ind. :

Gentlemen—At your meeting held May 1st you condemned the schoolhouse at Jamestown, Ind., in Boone County, Jackson Township. I have been building a new schoolhouse at Advance, at an expense of about \$20,000. This precludes the possibility of building a new schoolhouse at Jamestown this year, simply because the money was not to be had. On this account the township advisory board could not and did not make an

appropriation. I think it is possible to put the condemned schoolhouse in such shape that it will not be altogether objectionable, and will gladly do so, if your honorable board will grant the extension of the time of condemnation. I will promise to have the schoolhouse thoroughly cleaned, the walls calcimined as soon as possible, and new outhouses will be built with good approaches to them. I will also command the teachers to look closely after the ventilation of the rooms, and the windows will all be looked over to see that they can be raised and lowered easily. I will also have baffleboards put in at least two windows in each room. I believe these changes will make the building more useful and will attend to them without delay.

Again respectfully requesting an extension from your honorable board,
I am,

Respectfully,

W. H. MILLER,
Trustee Jackson Tp., Boone Co.

After consideration of the Jamestown schoolhouse matter, the following order was adopted:

Ordered, That the date of the condemnation of the Jamestown schoolhouse be extended from June 1st, 1907, to June 1st, 1908, and that the said school may be used for school purposes for the term of 1907 and 1908: Provided, The said schoolhouse is thoroughly cleaned, the walls calcimined, all windows made to move easily up and down for purposes of ventilation, all windows provided with baffleboards, and the teachers directed to flood the schoolrooms with air at all recesses and at noon, and to promptly send home any child that is known to be sick.

LECTURES AND CIRCULARS ON VENEREAL DISEASES.

The secretary proposed that the Board take up the fight against venereal diseases; that circulars be published for free distribution and that lectures be given before the youth of high schools, by members of the Board, or by others, who might be enlisted in the work. The secretary said that he had already spoken to Dr. C. S. Woods, professor of Chemistry in the Indiana Medical College, and that that gentleman, being deeply interested, a good lecturer and well-equipped for the work, would make lectures from time to time before the young men of the state, his expenses to be paid by the localities where said lectures were given.

After discussion of the matter, it was

Ordered, That the secretary shall write and publish a circular treating of the dangers and the prevention of venereal diseases, and that the Board herewith expresses its confidence in Dr. C. S. Woods as a public lecturer upon venereal diseases and recommends him as such to the public.

RULES.

The following rules, after study and discussion, were unanimously passed:

RULES GOVERNING CANNERS AND PACKERS IN CERTAIN SANITARY MATTERS AND IN CERTAIN FEATURES OF CANNING AND PRESERVING.

Rule 1. Packing houses, canneries and all food-preparing establishments shall be well lighted and ventilated, provided with sanitary water closets, separate from rooms in which foods are prepared, and also provided with suitable sanitary washing facilities.

Rule 2. Floors shall be made of cement, or of solid plank so laid that they may be flushed with water at the end of each day. False or loose floors are forbidden unless laid over cement.

Rule 3. No water or waste material shall be allowed to accumulate under or about any factory, canning or packing house, and all drainage shall be efficient and sanitary. All refuse or substances liable to fermentation or decay shall be promptly removed.

Rule 4. The employment is prohibited of persons suffering from cancer, tuberculosis, syphilis, gonorrhoea or any contagious or infectious diseases, or whose hands have sores upon them.

Rule 5. Proprietors of packing houses, canneries and of all food-producing establishments shall post notices prohibiting spitting upon floors, and shall require employes to wash their hands after going to the water closet and before returning to work.

Rule 6. The use in food products of saccharine, dulcin, sucrol, garrantose, hayden sugar crystals, glucin, or any coal tar sweetness, is prohibited.

Rule 7. The use of sulphurous acid or any of its salts, either as a bleach or preservative, is prohibited.

Rule 8. The use of any antiseptic or preservative substances except salt, saltpeter, sucrose, vinegar and spices, is prohibited; but one-tenth of one per cent. of sodium benzoate may, for the packing season of 1907, be used for preserving tomato catsup and bulk sweet pickles.

FLOYD COUNTY JAIL.

On account of several complaints I visited New Albany, September 5th, in company with Mr. Amos Butler, secretary of the State Board of Charities, to investigate the sanitary conditions of the Floyd County jail. In regard to the same, I have to report as follows:

The Floyd County jail, built in 1858, is of stone construction, having in its interior an iron cellhouse, three tiers of cells in height, thirty-four cells in all. The first or bottom range of cells are ten in number, one being used for a water closet and the space by two cells is occupied as a passage and an area for a castiron bath tub, said tub being supplied with hot and cold water. The middle range of cells on the west side are used for female prisoners and are connected by a bridge with iron lattice

on each side and with an iron stairway with the corridor which opens directly into the sheriff's office. The gallery of the female cells is partitioned from the male galleries by an iron lattice which permits the prisoners of both sexes to plainly see and converse with each other. More than this, the arrangements permit personal contact.

The iron cell structure has not been cleaned or painted for many months, as is plainly apparent upon casual inspection. Accumulations from expectoration and dirt are in many corners, and in other places. The closets, which were formerly in the cells, have been torn out, and now one closet, constructed in one of the ground-floor cells, serves all the male prisoners. The pipes leading from this closet are clogged and sewage remains upon the floor. This closet is exceedingly foul, and odors from it permeate the entire building, so that the prisoners live, as it were, in a foul privy or sewer.

The jail is lighted by barred high windows in the east and west sides of the outer walls, and said windows are very dirty, not having been washed for a long time. The window sills in the space between the grating and the glass are covered with dirt and accumulations of cigar and cigarette stumps, quids of tobacco and various kinds of trash, as little pices of rags, burnt matches, dead flies, etc.

The bunks in the cells are provided with mattresses, some of them old and dirty, and some new and passably clean. The prisoners sleep in their day clothes. No bugs were found upon search, but I was assured by prisoners they appeared from time to time and a constant fight was necessary to keep them out. Spittoons were provided, all of them being well filled and in repulsive condition. No effort seems to be made to make the prisoners use the spittoons, for spitting anywhere and everywhere is done all the time.

The ventilation is by the high windows on the sides, and is insufficient, as also is the lighting.

At the time of my visit there were fifteen prisoners in the male department, and three women and one boy eleven years old occupied the corridor and the women's cells. Two of the women were colored and all three were hardened creatures.

One young man, a consumptive, now in the highly infective stage of the disease, was among the prisoners. His offense is embezzlement, and not being able to give bond, he must be imprisoned until the October term of court for trial. This man coughs a great deal, and although he assured me he always expectorates in the spittoons, still, through his coughing he spreads infection continually. There is now not the slightest chance for his recovery, whatever might have been his chances before imprisonment.

The closet in the corridor for the use of the females is in one corner, has no outdoor ventilation, and although not clogged, still was unfit for a decent person to use.

Dr. Wilcox, jail physician, reported thirteen cases of gonorrhoea among the male prisoners, which was contracted from a female prisoner while in the jail.

One of the colored female prisoners, upon being questioned, told me contact between the sexes was frequent, and was accomplished by the men swinging themselves by a blanket from the upper tier of cells to

the outside of the lattice below, and the women on the inside of the lattice raised themselves to the level of the men by piling mattresses on the floor of the gallery.

Dinner was being served at the time of the inspection, and consisted of bread, boiled beans, meat and coffee. The food was of good quality and well cooked.

Summary.—The Floyd County jail is old, never was properly constructed, is foul, dirty, malodorous, sewer pipes clogged, insufficiently lighted and ventilated, infected with disease, immorality of the most horrible kind is continually practiced among the prisoners, and altogether it is a disgrace to New Albany, to Floyd County, to the State of Indiana, and to civilization.

Recommendations.—I recommend that the Floyd County jail be condemned as unsanitary, and in every hygienic way unfit for use as a jail.

Concerning the Floyd County jail the following action was taken:

CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health that the Floyd County jail at New Albany, constructed in 1858, is insufficiently lighted and ventilated, is dirty, foul, reeking with sewage on account of clogged sewer pipes, and is certainly infected with tuberculosis and other infectious diseases; and,

Whereas, The construction admits of sexual commerce between the sexes, with, in well-known instances, transmission of gonorrhœa and possibly syphilis; therefore, it is

Ordered, That the Floyd County jail at New Albany is condemned and the Floyd County Board of Commissioners are commanded by the Indiana State Board of Health, having the power as provided in the statutes, that the said county council and said board of commissioners shall proceed without unnecessary delay to make the Floyd County jail sanitary in one of two ways, to wit: First, by erecting a new jail, having all modern sanitary conditions, as may be prescribed by the Indiana State Board of Health; or, second, by thoroughly renovating the present structure, and in order to accomplish said renovation the following procedure shall be adopted:

(a) All prisoners shall be removed, the interior walls, floors and all iron and steel work thoroughly cleaned with lye water and soap, and after this cleaning the said interior walls and iron work shall be painted. A completely separated female department shall be prepared, so arranged that males and females can not see and can not communicate with each other. All present closets shall be torn out and new ones put in, at least two new closets for the males and at least one for the females. The present sewer pipes shall be dug up and new ones laid of ample size to completely carry off all sewage.

It is further ordered that two modern porcelain bath tubs be provided, one for the males and one for the females, said tubs to be supplied with an abundance of hot and cold water and to be properly connected with the sewer.

The above condemnation and order was unanimously passed.

Fourth Regular Meeting.

REGULAR MEETING, INDIANA STATE BOARD OF HEALTH.

October 11, 1907.

AFFAIRS CONSIDERED OF THE FISCAL QUARTER ENDING JULY 31ST, 1907, AND THE STATISTICAL QUARTER ENDING SEPT. 30TH, 1907.

Called to order by President Tucker at 2 p. m. Present: Drs. Davis, McCoy, Hurty.

Minutes of the last regular meeting held July 12th, 1907, and minutes of the special meeting held Sept. 12, 1907, read and approved.

REPORT OF SECRETARY FOR QUARTER ENDING SEPTEMBER 30, 1907.

The correspondence during the last quarter was much heavier than in the corresponding quarter last year. The statistics and office work, also the work of both laboratories, have been carefully kept up to the standard. Reports of the work done in the laboratories are appended to this report.

The International Congress on Tuberculosis, to be held in Washington in September and October, 1908, has been a central piece of work during the quarter. The secretary-general of the International Congress, Dr. John S. Fulton, has sent out circulars to all the state boards of health, followed by letters urging the participation of the states. Circulars and letters were also sent to all governors and to all mayors of cities having a population over 25,000. In response to the letter of the Governor of Indiana requesting him to do what he could to make the International Congress a success, we have to present the following communication:

October 4, 1907.

To the Indiana State Board of Health:

Permit me to enclose you herewith correspondence from Dr. John S. Fulton, secretary-general of the International Congress on Tuberculosis, extending an invitation to the State of Indiana to participate through the Governor, the State Board of Health, boards of health of municipalities, and other agencies in Indiana interested in tuberculosis, in the International Congress on Tuberculosis, to be held in Washington, D. C., September 21 to October 12, 1908, by sending delegates and contributions of

exhibits thereto. This congress promises to be one of unusual importance. It will be a great gathering of scientific men from the civilized nations of the world, and I deem it advisable that the State of Indiana be properly represented.

I suggest, therefore, that the State Board of Health take steps to insure the presentation of such exhibits on the part of this commonwealth as the Board after due consideration may deem proper and advisable, and that invitation be extended to the boards of health of municipalities and other agencies interested in tuberculosis to join with the state in participating in the congress.

I submit herewith correspondence from the files of this office relative to the subject.

Very truly yours,

(Signed) J. FRANK HANLY,
Governor of the State of Indiana.

It will be noted the Governor recommends that the State Board of Health take steps to insure the presentation of such exhibits on the part of this commonwealth as the Board may deem proper and advisable, and as secretary, I also recommend that said action be taken. I also recommend that this Board request the Governor to write a letter to the county health officers of the state and the health officers of the cities having a population over 10,000, calling their attention to the International Congress on Tuberculosis, its very great importance, its purpose and scope, and to urge that they become interested and join in the work of making the congress a success. I further recommend that this Board write a similar letter. In connection I will state that the governors of the following states have written letters of the character recommended above: New York, Illinois, Ohio, Pennsylvania and all the New England states.

SMALLPOX COMPARISON FOR THIRD QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
July, 1906.....	31	3	6
July, 1907.....	74	.....	21
August, 1906.....	40	.....	3
August, 1907.....	63	.....	18
September, 1906.....	51	2	10
September, 1907.....	23	.....	7
Total, 1906.....	122	5	19
Total, 1907.....	160	.....	46

TYPHOID FEVER COMPARISON FOR THIRD QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
July, 1906.....	180	62	55
July, 1907.....	312	53	64
August, 1906.....	446	98	68
August, 1907.....	728	131	79
September, 1906.....	977	143	76
September, 1907.....	642	133	76
Total, 1906.....	1,603	203	199
Total, 1907.....	1,682	317	219

VISITS AND INSPECTIONS.

Seven visits and inspections were made as follows:

July 8th, Danville, on account of inspection of water supply and conference with town authorities.

July 12th, Kirklin, on account of reinspection of schoolhouse as ordered by the Board.

July 16th, Carmel, in order to meet with the town board and advise in regard to sanitary work, and in the evening to talk to an audience especially gathered in regard to public sanitary affairs.

August 30th, Bedford, to meet with the county and city authorities to consider public health affairs. The special point to be considered was the continuation of the hitch rack at Bedford.

September 5th, New Albany, to inspect the jail, report of which has heretofore been presented and acted upon.

September 7th, Lafayette, to visit the State Soldiers' Home and make sanitary inspection.

September 20th, Morgantown and Martinsville, to inspect the schoolhouses at Morgantown and to confer with the township trustee in regard to a new one to be constructed. At Martinsville, to inspect the books of the local health officer, who had been negligent of his duties and from whom no response to letters could be secured. Below, full reports of these visits are given:

Danville.—On arrival at Danville, where I was accompanied by Mr. C. C. Clapp, an inspector of the U. S. Geological Survey, we were met by the chairman of the town board, the clerk, and Mr. Julian Hogate, editor of a local paper. Together we visited the water works. Danville is supplied from deep, flowing wells. Upon removal of caps, the water is projected to a height of six feet. The supply is abundant, is cool, and analyses have shown it to be pure and wholesome. The system is that known as the Holley system,

where the water is distributed by direct pressure. There was no complaint in regard to the public water supply. The only question was, is it good and plentiful? Both of these questions could be answered in the affirmative, and Danville is to be congratulated upon having such a remarkable water supply, which is so pure and so abundant. Upon return from inspection of the water works, a conference was held in regard to the continuance of the horse-rack, and the sanitary features attached thereto. The secretary presented sanitary arguments why the horse-rack should be removed, calling attention to the advantages which would result from the sanitary changes.

From Danville, with Mr. Clapp, I rode to Cartersburg and Plainfield, at both places meeting with the local authorities, discussing sanitary conditions and making recommendations.

Kirklin.—July 15th: Kirklin was visited on this date in order to make a second survey of the schoolhouse at that place, according to the commands of the Board. Upon arrival I was met by the local health officer, Dr. Parker, and together with a number of citizens, examined the schoolhouse. The conditions discovered confirmed fully the previous survey made by Captain Anderson, and upon which the said schoolhouse was condemned. According to the power conferred by the Board, I did not waive the condemnation but continued the same.

Carmel.—July 16th: On account of an invitation of the local authorities, a local society of women for civic improvement, I went to Carmel. Upon arrival, together with the local health officer and citizens, alleys and the schoolhouse were inspected, also the local creamery and slaughter house. The slaughter house was found in abominable condition, but no action was necessary because the proprietor of the same promised to immediately quit using it for slaughtering purposes and to clean it up. I have learned since this has been done. In the evening a large audience was addressed in the Friends' Church upon the subject of municipal and domiciliary hygiene. I believe this visit will eventually produce good results.

Bedford.—August 30th: An invitation from the county and city authorities caused me to go to Bedford to consult in regard to various public sanitary matters, but especially in regard to the public hitch-rack. New streets are being built around the public square and sidewalks and sewers are also being built. The ques-

tion was, whether or not to continue the public hitch-rack. The matter was gone over fully from all points of view, and upon taking a vote it was the sense of the meeting that the hitch-rack should be abolished. The county and local health authorities were addressed in regard to their duties and the good work that they could do under the law to raise the public health.

New Albany.—September 5th: With Mr. Amos Butler, secretary of the State Board of Charities, I went to New Albany to inspect the jail. Full report of this inspection was presented to the last special meeting; the same was accepted and acted upon.

Lafayette.—September 7th: This visit was for the purpose of inspecting the Soldiers' Home and making such recommendations as might seem proper. It was a stormy day and the inspection was somewhat difficult upon that account. I have to report very great improvements in the hospital since our previous inspection and recommendations from this Board. The water closets now have cement floors and cement walls to a distance of 4 feet high. The partitions are raised from off the floor, repainted, and the ventilation bettered. On account of the original defects in the hospital when built, it is impossible by improvements to produce the sanitary conditions which economy and the proper care of the sick demand. A new hospital is now being constructed, and the plans, if adhered to until the end, show that the new building will be sanitary in all respects. The health of the institution is good, but, of course, the sick rate and death rate is very high, because all the inmates are aged people. Tuberculosis exists very extensively, but there is no hope of saving any of the cases examined, because of the advanced age and because of the advanced condition of the disease. Several minor recommendations were made to the commandant, for which he expressed thanks.

Morgantown.—The schoolhouse at Morgantown was condemned as unsanitary one year ago, and subsequently permission was given to the trustee to use the schoolhouse this winter, provided certain improvements were made. Complaint by telephone was received that improvements were not made and asking for an inspection. Accordingly I went to Morgantown on September 20th, called upon the trustee, and together we visited the schoolhouse. I found the report to be true in part. Galvanized iron jackets had been provided for the stoves, but ventilating boards had not been placed in the windows. The trustee said he was waiting for these

boards, that they were ordered and would be in place very soon. I met two members of the advisory board and we talked the situation over. It was agreed that a new schoolhouse would be erected next year and ground has already been purchased.

Martinsville.—From Morgantown I went to Martinsville and called upon Dr. Sweet, acting deputy for Dr. Monical. We had been unable to secure satisfactory reports from Dr. Monical. Miss Stuart of the office force had been in Martinsville some weeks before, and in accordance with directions had called upon Dr. Monical to see his books. He refused to let her look at them, saying that he had employed a man to do the work and that he would see to it that the work was done. I found the books at Dr. Sweet's office and quickly discovered that Dr. Monical had been very derelict. A large number of birth reports were in a cigar box, unrecorded, and there was also a considerable lot of contagious disease reports. It seems that Dr. Monical had not attended to the affairs of his office at all, and was derelict in every sense of the word. Later I directed Miss Stuart to go to Martinsville and post up the books, which was done and her report follows. While in Martinsville, I called upon the auditor and talked the matter over with him and asked him to bring it before the county board of health. Upon return, I wrote a letter to the County Board of Health, to be delivered through the auditor. At this date it is known that Dr. Monical will not return from California, and that a new health officer will be appointed.

On October 2d, Miss Stuart went to Martinsville, Morgan County, to make up reports of births, marriages and contagious diseases for the quarters ending March 31, June 30, and September 30, 1907. There were no records of either births, marriages or contagious diseases entered upon the books for the year 1907, but the reports of births and contagious diseases which had been sent in by the doctors in the county were found in the office of the secretary, Dr. G. S. Monical, and from these a report was made up for each of the three quarters. As there were no records of marriages in the secretary's office, this report was made from the record of marriages found in the county clerk's office. No record of marriages has been kept by the secretary since 1905. There were only twenty-four contagious diseases entered upon the record books for 1907.

The transcripts of records of death, which are sent to the secretary at the end of each quarter, had not been bound for the year

1906, and all books in the office were found in a very bad condition. The reports from Morgan County are, with the exception of the returns for September, which had not yet been received at the county office, on file in the State Board of Health.

COLLECTION OF RECORDS OF BIRTHS.

According to the law passed by the Sixty-seventh General Assembly, and according to the directions of the Board, all preparations have been made for collecting births under the new law, commencing October 1st. New birth certificate blanks were printed, the same according with those furnished by the U. S. Census Bureau, and which are also in use by New York, Massachusetts, Pennsylvania and Michigan. These blanks have been distributed to all doctors in the state and all health officers have been instructed by special circulars in regard to their duties. In addition to this, the newspapers in every locality have been requested to publish the facts in regard to the enforcement of the new law, and to impress upon the people the very great importance of having accurate records made of all births, deaths and contagious diseases. These notices and brief articles were gladly printed by the newspapers and the prospects for a more accurate collection of births are very good.

SANITARY SURVEYS IN ORANGE COUNTY.

By F. W. Tucker, Noblesville, Ind.

I herewith submit a report of various sanitary surveys made in Orange County, Indiana, as follows, to wit:

August 23, 1907, I visited School No. 6, in French Lick Township, Orange County; found the following conditions: Site—Ground high, dry, and rolling, good drainage, clay soil, over limestone. Building an old one-room frame, on plaster foundation, under each corner and center of building. Sits about two feet off the ground, no wall, no basement under house, house in need of repairs. Roof leaks very badly and the plastering has fallen off about the flue. The house is heated by a boxwood stove; no protection to children near the stove; there is no well at this school; the children carry water from a spring about one-fourth mile from the schoolhouse. There is no form of ventilation except by the windows and doors and floor openings. There are two closets that are mere excuses for the name, built out of straight siding, open cracks, no vaults, both closets full of feces up to seats, no screens for the girls' closet. The yard is grown up with weeds and rank vegetation. Children have bronchitis and tonsillitis in epidemic form every winter, and the school is very much interferred with.

I would recommend new and thorough heating service, with hoods for the stove, repair to roof and ceiling, and sanitary, screened closets, with better facilities for drinking water as a temporary arrangement.

School No. 11, in French Lick Township, Orange County, was visited by me on Saturday, August 24, 1907, and found the site high, rolling, good drainage, clay soil over limestone. Building a one-room frame building, open foundation about two feet off ground. Roof good and new, plastering off room on ceiling around flue hole, floor open in several places, room is lighted by seven (7) windows, giving sufficient light. School is heated by a box wood stove, no hood or screen around it. The stove sits in center of room. There is no well at this house. The children carry water about 300 yards. Only one closet and it in a disgraceful condition. Recommendations are that new sanitary closets be provided, new well, or facilities for water, that the foundation be closed under entire house, thereby making it warmer. That good and sufficient sunshades be provided.

These findings and recommendations be furnished to Thomas J. Carre, township trustee, French Lick, Ind.

August 26, 1907, I made a sanitary survey of French Lick, in company with Dr. Toliver, the town health officer, and found the streets and alleys in very bad condition; also the backyards and many vaults and vacant lots, and made suitable recommendations in each case, with instructions to have same observed at once. The town is improving the streets and sidewalks and providing good and much-needed drainage. I feel that if the suggestions as made are carried out there will be much good done.

On Tuesday, August 27, 1907, I called on Dr. Boyd, town health officer of West Baden, and found him out, but proceeded to make sanitary survey of the town, and found a dirty, filthy condition of streets, alleys and vacant lots, and every evidence of no observance of a weed-cutting ordinance, and would make the following recommendations to Dr. Boyd, health officer, West Baden: That the streets, alleys and all vacant lots be cleaned and kept clean and garbage and all decayed vegetable matter at hotels, restaurants and private homes be cared for and cleaned up and kept clean, and that the weeds and other rank vegetation be cut and kept cut, same to be observed on or before September 15, 1907.

On Wednesday, August 28, 1907, I visited Paoli, Ind., and in company with the town health officer visited various places, as the water-works, creamery, alleys, streets, courthouse, jail, and many private grounds, and found Paoli in very good condition. The streets are clean, well kept; creamery clean and sanitary in every particular. The alleys and rear yards need cleaning of accumulated garbage and weeds, and so ordered. The courthouse is well kept and clean; the courthouse closets are in good condition and clean and sanitary. The town and county health officers keep good records and are reasonably diligent in collecting vital reports.

I would recommend that the town health officer be instructed to carry out the suggestions made him about weed cutting, and alley and backyard cleaning, and he be commended for his efforts to keep the town in a sanitary condition.

On Thursday, August 29, 1907, I visited Mitchell, Ind., and found that they had just a few days prior taken on the robe of a city, and that Mayor Brown had not selected his health board yet. So I made a sani-

tary survey of the hotels and streets and alleys. I ordered three closets cleansed and abandoned at three hotels, and a general cleaning around the premises. The streets and alleys are generally very good, but need weed cutting. I would recommend that a copy of our health rules and ordinance for towns and cities be sent to Mayor Brown or Mitchell.

STATE OF INDIANA,

INDIANAPOLIS.

September 30, 1907.

Dr. J. N. Hurty, Secretary State Board of Health, Indianapolis, Indiana:

Dear Sir—Your favor of the 23d inst. at hand, asking whether it is permissible for the State Board of Health to send one or more delegates to attend the annual meetings of the National Association of State Boards of Health, and to pay their traveling and hotel expenses out of the health fund.

The appropriation act of 1907 contains the following provision, p. 680:

“Board of Health—For other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of \$10,000.”

In the same section, the traveling and hotel expenses of those conducting inspections are covered.

On page 685 of the Act of 1907 occurs the following:

“All appropriations herein provided, designated, and intended as and for traveling and hotel expenses for any department, officer, agent, employe, person, trustees or commissioners, other than for the Attorney-General or his assistants, or for the Indiana Jamestown exposition commission, shall be construed to mean and is hereby intended to be confined to such traveling and hotel expenses within the State of Indiana and not elsewhere.”

Your letter does not state whether the annual meeting for the present year is held within or without Indiana. However, under my construction of the statute, this fact is immaterial.

It is apparent from the section first above quoted that the “other expenses” referred to are of the same general nature as office expenses, expenses connected with enforcement of the pure food law, the prevention of pollution of waters and the arrest of diseases. All these classes relate to the performance of strictly official duties. The attendance of the Board by delegation at a national convention is not the performance of a duty imposed by law.

The expenses incurred by such attendance can not be embraced within the words “official expenses,” since the latter are clearly distinguished from traveling expenses in the section of the appropriation act immediately preceding the one in question, as well as in the appropriations for the executive department (p. 671-672), the Attorney-General (p. 673), the Department of Public Instruction (p. 675), the Factory Inspection Department (p. 678), and the Labor Commission (p. 681).

I am, therefore, of the opinion that the health fund can not be drawn upon for the purpose indicated in your communication.

You also inquire whether, under the appropriation of 1907, p. 158, for the "purchase of laboratory supplies," the same may be utilized in procuring tables, plumbing and gasfitting, necessary for supplying the laboratory with needed facilities for analytical work. The same section of the act permits the use of the \$15,000 appropriation in "meeting expenses incurred in the enforcement of this act including * * * expenses incident to the enforcement of this law." Within this broad provision I think the purchase of the equipment you mention clearly falls.

I have the honor to be,

Very truly yours,

JAMES BINGHAM,
Attorney-General.

QUARTERLY REPORT OF BACTERIOLOGICAL LABORATORY.

Total number of specimens examined, 1,246.
Sputum samples, 599; positive, 231; negative, 368.
Diphtheria samples, 93; positive, 83; negative, 10.
Typhoid samples, 353; positive, 74; negative, 279.
Malaria samples, 27; positive, 2; negative, 25.
Miscellaneous samples, 47; positive, 33; negative, 14.
Water supplies, 133; good, 49; fair, 17; bad, 47.
Milk samples, 9; bad, 9.
Urine samples, 2; feces, 1; uterine fluid, 1; ascetic fluid, 1.
Otufits of all kinds sent out, 1,875.

To the State Board of Health, Indianapolis, Ind.:

Gentlemen—I herewith submit a report of the Chemical Department of the Laboratory of Hygiene for the three months ending September 30, 1907.

During this period five food and drug inspectors have been constantly employed on the road, and have visited seventy-seven cities and towns. In each place visited a thorough inspection of food-producing establishments, groceries, meat markets and drug stores was made. The local health officer has been visited, and so far as possible both the sanitary and corrective features of the food law have been carried out. The population of the cities and towns visited is 651,225. Twelve cities have been visited two or more times.

The total number of inspections made during the quarter was 2,092 and the results are classified as follows:

SUMMARY OF INSPECTIONS FOR JULY, AUGUST AND SEPTEMBER, 1907.

Inspections.	No.	Excel- lent.	Good.	Fair.	Poor.	Bad.
Dairies.....	67	3	13	25	8	18
Groceries.....	511	26	213	230	40	2
Meat markets and slaughter houses.....	335	18	143	109	46	19
Drug stores.....	197	23	120	49	5	0
Bakeries and candy shops.....	185	12	84	73	14	2
Hotels and restaurants.....	240	9	77	109	37	8
Canning factories.....	25	0	9	12	3	1
Bottling works, wineries and breweries.....	20	2	9	8	1	0
Poultry houses.....	9	0	1	5	2	1
Coca Cola works.....	2	0	1	1	0	0
Butter packing houses.....	2	0	0	2	0	0
Ice cream and ice factories.....	5	0	4	1	0	0
Creameries.....	3	0	1	2	0	0
Cold storage.....	2	1	1	0	0	0
Dead animal contractor.....	1	0	0	1	0	0
Fruit stand.....	1	0	1	0	0	0
Pasteurizing station.....	1	1	0	0	0	0
Sorghum works.....	1	0	1	0	0	0
Total.....	1,607	95	678	627	156	51
Number of second inspections.....	485	14	131	307	32	1
Total.....	2,092	109	809	934	188	52

The inspectors report conditions in groceries, meat markets and drug stores to be on the whole as satisfactory as could be expected at the beginning of a new era of food and drug work. Slaughter houses and dairies, on the other hand, have been uniformly bad, and many have been closed until such a time as they were put in condition suitable for use.

During the three months 159 prosecutions have been made, distributed in the various counties as follows:

Allen	3	Lake	5
Carroll	2	Madison	4
Cass	12	Marion	22
Clark	3	Montgomery	6
Clay	3	Monroe	2
Clinton	1	Orange	1
Floyd	11	Posey	1
Fountain	7	Putnam	2
Grant	13	Sullivan	9
Greene	3	Tippecanoe	1
Jackson	2	Vermillion	2
Jefferson	4	Vigo	30
Johnson	1	Warren	1

Of the entire number of cases tried in the courts, 150 defendants were found guilty and nine cases were dismissed by the judge on account of technicalities, or found not guilty. The fines and costs levied against violators of the Food and Drug Law aggregate \$2,715.25. The corps of inspectors are working satisfactorily and their work is meeting with hearty response in every city visited. Their duties as food and drug inspectors may well be supplemented after a time by a study of water supply and sewage disposal conditions.

FOOD AND DRUG ANALYSES.

During the quarter 830 samples of food products were analyzed, 733 samples of which were pure and 104 adulterated, indicating a percentage of adulteration equivalent to 12.4. This is a remarkable improvement over the work of last year, and is directly attributable to the passage of the Pure Food and Drug Law.

The percentage of adulteration in milk samples amount to only 6.2% ; of vinegars, 39% ; of butters, 20% ; of extract of vanilla, 5.5%.

FOOD ANALYSES.

Article.	Pure. Adulterated. Per Cent.		
Butter	25	6	20.0
Canned fruits	7	0	00.0
Cream	16	3	15.8
Cream tartar	2	1	33.3
Extract lemon	5	7	58.3
Extract vanilla	51	3	5.5
Extracts, miscellaneous	2	0	0.0
Ice cream	60	20	25.0
Jelly	1	0	0.0
Lard	66	12	15.4
Meat products	41	3	7.0
Milk	331	22	6.2
Mother's milk	4	0	0.0
Olive oil	26	0	0.0
Spices	0	1	100.0
Spirituous liquors	18	2	10.0
Summer drinks	40	4	9.1
Syrup	2	0	0.0
Vinegar	25	16	39.0
Miscellaneous	11	4	26.1
Totals	733	104	12.4

Two hundred and six samples of drugs were analyzed, 112 of which were found to be pure and 94 adulterated, indicating a percentage of adulteration equivalent to 45.6. The conditions in the drug trade are still extremely unsatisfactory, and it is evident that vigorous prosecution of druggists whose goods are not up to U. S. P. requirements must be carried on before conditions will be greatly improved. Sixty-eight per cent. of the spirits of camphor were below strength; 39 per cent. of the lime waters were below standard; 54.3 per cent. of the tr. of iodine; 63 per cent. of the tr. of iron. It has been our desire to afford the druggists every opportunity to raise the standard of their preparations, and wherever goods have fallen below the U. S. P. strength we have sent them a warning notice calling attention to the quality of their goods and asking for an explanation. The trade takes very kindly to this method of work, and yet conditions do not improve. Whereas it has been up to this time our policy to prosecute druggists only when their goods fell below 50 per cent. U. S. P. strength, it is apparent that we shall be obliged to hold them to the letter of the law, if we are to secure an improvement.

DRUG ANALYSES.

Article.	Pure.	Adulterated.	Per Cent.
Alcohol	4	1	20.0
Arnica	13	0	0.0
Bay rum	7	0	0.0
Es. ginger	4	1	20.0
Es. peppermint	1	0	0.0
Glycerine	1	0	0.0
Lime water	16	10	39.0
Oil cloves	1	0	0.0
Precipitated sulphur	1	5	83.3
Spirits camphor	8	17	68.0
Sweet spts. nitre	1	0	0.0
Tr. capsicum	10	17	63.0
Tr. ginger	3	2	40.0
Tr. iodine	21	25	54.3
Tr. iron	7	12	63.1
Witch hazel	5	0	0.0
Miscellaneous drugs	9	4	44.4
Total	112	94	45.6

WATER ANALYSES.

During the quarter ending September 30, 1907, 295 samples of water were analyzed. Two hundred and forty-three of these samples were from either shallow or deep wells, and of the entire number 108 were classed as in good condition and potable and 96 were so badly polluted as to be unsuitable for drinking and domestic purposes, and 39 were in that condition usually designated as of "doubtful quality." Fifteen of this last class were duplicate results on the Noblesville water supply.

Of the seventeen stream supplies, eleven were potable and two were seriously polluted. Four pond or surface waters were examined and all were found to be pure. Of thirteen spring waters analyzed, six were potable, three were polluted and four were of doubtful quality. Eight cistern waters were analyzed; three were satisfactory and five were condemned because of the presence of polluted surface water. The two distilled waters were both satisfactory.

In addition to this work something has been done in the way of complete chemical analyses of certain ground waters collected and sent to the laboratory by the United States Geological Survey. While this work is of little apparent worth at the present time, I believe we should continue to co-operate with the Geological Survey in their study of Indiana waters and trust to the future to show the value of the work.

The analyses reported are all of the class known as sanitary chemical analyses and include the determination of such chemical factors as are considered indexes of pollution. In addition a presumptive test for bacteria of the colon type is always made on a 5 cu. c. c. sample of the water. This test is by no means a conclusive test and should not be so considered, but a negative result is of great value in checking up the chemical analyses. It is to be hoped that in the near future the laboratory

will be in a position to make as careful bacteriological studies of all the water supplies investigated as it is now doing in a chemical way.

Respectfully submitted,

H. E. BARNARD.

DR. RUCKER'S RESIGNATION.

To the State Board of Health:

Gentlemen—I hereby tender to you my resignation as director of the division of Bacteriology and Pathology of the Laboratory of Hygiene, which resignation shall come into effect before the first day of October, 1907, as your honorable body shall direct.

Respectfully,

J. B. RUCKER, Jr., M. D.

Moved, by Dr. McCoy, That the resignation of Dr. Rucker be accepted, and the secretary be instructed to find a successor, and in the meantime conduct the laboratory according to his judgment. Carried.

The coming meeting of the International Congress on Tuberculosis, to be held in Washington, D. C., in the fall of 1908, was considered, and the secretary was directed to write, have printed and to distribute a letter from the State Board, approving the said congress, and recommending the same to the people of the state. Also to prepare an exhibit for the occasion.

Consideration of rules establishing minimum standards and defining adulterations of whisky and other alcoholic liquors. After discussion, it was

Ordered, That a special meeting be held October 25th, to be called to order at 2 p. m., to hear all who wished to be heard upon the subject, and to then take such action as might be deemed proper.

After discussion it was ordered, That the secretary write a letter in the name of the Board to all holdover senators concerning the sanitary legislation that is needed.

Ordered, That any member wishing to attend the annual State charities meeting at Evansville, October 19th to 25th, could do so. Expenses to be paid.

Moved by Dr. McCoy, That the Secretary shall ask the street-car companies of the State giving transfers, to print upon the back of said transfers such facts concerning the prevention of consumption as might be deemed proper.

POSTAL CARD BIRTH CERTIFICATES.

The matter of furnishing birth certificates on postal card forms was discussed, and the final action in the matter given to the president and secretary.

SPECIAL MEETING.

October 25, 1907.

This special meeting was ordered by the Board at its regular meeting, October 11th, the object being to consider passing rules, establishing standards for liquors and to hear arguments by those interested.

Called to order by President Tucker at 2 p. m. Present: Drs. Tucker, McCoy, Davis, Wishard, Hurty.

The following-named gentlemen, all representing the liquor interests, were present: Mr. L. P. Rappaport, attorney, Indianapolis; Hon. John F. Joyce, Terre Haute; Mr. R. Lieber, Indianapolis; Mr. E. M. Babbit, Louisville; Mr. Harold Schmidt, Indianapolis; Mr. John E. Beggs, Terre Haute; Mr. W. J. Groenwoldt, Indianapolis; Mr. Victor M. O. Shaughnessy, Lawrenceburg; Mr. John Pohlman, Indianapolis.

Mr. Rappaport, attorney, made a plea that the proposed standards for liquors adopted by the U. S. authorities be not adopted at this meeting of the Indiana State Board of Health, but that the matter be postponed until such time as the U. S. authorities took definite action. A large number of letters from the pure food authorities of other States were presented, in which the writers declaimed their intention of not acting in the matter of establishing liquor standards until the definite action of the U. S. authorities was known.

Arguments for the above contention were made by Mr. John E. Beggs, Mr. R. Lieber, Mr. Joyce and Mr. Babbitt. The last-named gentleman was given permission by the Board to make an argument against the adoption of the U. S. standards. Attorney Rappaport made an extended argument.

In executive session, after all who wished to speak had been heard, and after full consideration, the following motion by Dr. Wishard was unanimously adopted, as an order.

Ordered, The secretary shall ask an opinion from the attorney-general as to the following points of law:

(a) Does the State pure food law empower the State Board of Health to define a food, a drug or a spirituous liquor?

(b) Do spirituous liquors, under the pure food law, belong to the class of foods or the class of drugs?

(c) In a rule regulating minimum standards, would a definition of a liquor made therein in any way invalidate the rule?

Moved by Dr. Davis, That further consideration of the matter of defining liquors and establishing minimum standards be indefinitely postponed, the Board to meet upon call of the secretary.

Carried.

REPORT
OF
The Chemical Department
LABORATORY OF HYGIENE

Year Ending September 30, 1907

H. E. BARNARD, B. SC.,
Chemist in Charge and State Food and Drug Commissioner.

H. E. BISHOP, B. SC.,
Food Chemist.

I. L. MILLER, B. A.,
Drug Chemist.

NORRIS THOMPSON,
Ass't Chemist.

WM. D. McABEE,
Ass't Chemist.

SECOND ANNUAL REPORT OF THE WORK OF THE CHEMICAL DEPARTMENT OF THE LABOR- ATORY OF HYGIENE.

BY H. E. BARNARD, B. SC.

The health and wealth of citizens are each equally to be safeguarded. The attainment of these ends is the object for which the State Laboratory of Hygiene was established, and this report is an attempt to transfer to paper and to express by words and figures what the department has accomplished during the year ending September 30, 1907. It is impossible to do this either fully or accurately. Recorded lists of analyses made, of prosecutions instigated or of sanitary improvements obtained, but partially express the scope of the work and fail in a great measure to show its most valuable feature—the increased public interest in the character of the food, drug and water supply.

Laboratory work is valuable either as it determines facts or makes practical the application of these facts to the public betterment. It has been the aim of the department both to arrive at existing conditions and to point the way to more satisfactory situations along the lines limited by the scope of its work.

The study of public and private water supplies commenced at the establishment of the laboratories in 1905, has been continued. The results obtained are similar to those already published and establish the fact that a large percentage of the population of the State is depending for its water for drinking and domestic purposes upon polluted supplies. At the present time about 30 per cent. of the population is supplied with a public water service, the character of which is regulated wholly by the company supplying the water. The remainder, living on the farms and in the small communities scattered everywhere over the State, depend upon private supplies which are almost without exception the dug or driven well. Although the contrary opinion is most frequently held, the public supply is far safer than the individual well. It is true, however, that the corporation or municipality selling water to a householder is more careful of the character of the supply than is the user of water from an isolated well, and, as a result of

this watchfulness, the water drawn from the tap of a service pipe is more wholesome than that dipped from the dug well or raised by the pump from a bored or driven well.

For years to come more than half of the population will be dependent on the private supply, the character of which becomes a subject for thought only when illness calls attention to probable pollution. It is impossible to study the composition of water from more than half a million wells. Occasional help may be afforded the puzzled health officer who is unable to explain enteric epidemics, and assistance given the farmer who has learned to appreciate the value of pure water, but the problem of the isolated householder cannot be solved by the State except in so far as it is possible for the laboratory to teach the necessity for pure water and to give information that will help to obtain it.

The problem of the laboratory control of public supplies is, on the contrary, a comparatively simple one and has already been given some attention. That there is a decided need for work along this line is shown by the fact that of 142 samples from public supplies examined during the year, 55 or 38.7 per cent. were in some way not of normal character and were either receiving sewage or were contaminated by either vegetable or mineral waste products. The present laboratory equipment is insufficient to admit of the best results along the lines of water chemistry and bacteriology, and more room is urgently needed for the development of this department.

The work of the food and drug laboratories has been greatly increased as a result of the passage of the Pure Food and Drug Law, which took effect March 4, 1907. This law differs but little from the Pure Food and Drug Law enacted in 1899. The principal difference is that the new law does not recognize ignorance or lack of knowledge of the character of the goods supplied the consumer, as a valid excuse for violation of the law. The old law required the State to prove wilful violation, the new law insists that the seller assume all the responsibility for the character of the goods he sells. This provision of the law makes it an effective instrument with which to suppress adulteration and the results of the first eight months' work have shown the law to be effective and salutary in every respect. This law modified in many ways the law under which the laboratory has been working and placed larger funds with which to work in our hands. The results of the analyses of food samples indicates a greatly changed condition of affairs in

the last year. Not only has the percentage of adulteration dropped perceptibly, but it is becoming more and more difficult to find samples that may even be suspected of being impure. This condition is largely attributable to the passage of the Federal Food Law, which has compelled manufacturers to eliminate impure goods from all shipments intended for interstate trade. The manufacturers within this State, although not obliged to conform to the Federal law so far as it concerns the goods manufactured and sold within the State, have in every case that has come to our notice made and shipped the same high grade goods to their customers at home that they have sent to the trade outside the state. The new Food and Drug Law differs but little from the Federal law, and manufacturers whose goods are suitable for interstate trade find no difficulty in complying with the Indiana law, both as regards composition and form of label. There is still some doubt among manufacturers as to the proper way in which their goods should be labeled, but we have never found a case where there has been any attempt to disobey or evade the provisions of the State or Federal law. Many old goods are still on hand, both in groceries and drug stores, but these stocks have in most instances been properly labeled, and under such conditions are passed by the food inspectors. The purpose of the Food and Drug Law is, we believe, to secure uniform purity in food and drug products, and to maintain a high grade of excellence in these goods without bringing hardship to either the manufacturer or retailer. It is not our purpose or desire to condemn and destroy food products which have been sold without restraint for years, because they violate in some technical way, either as to labeling or ingredients, the provisions of the new Food and Drug Law. Whenever such goods are so marked that the label indicates what they are, and when it is clear that they have been manufactured before the present law went into effect, their sale will be allowed. All goods manufactured or shipped into the State since the passage of the law, and all goods now being packed, will be required to conform strictly to the law. We believe this ruling is well understood by the food and drug trade, and that all uneasiness and apprehension which may have been felt at the time of the passage of the law, has now passed away. No evidence has come to our notice of any attempt on the part of manufacturers and wholesalers within the State to do other than comply with the letter of the law.

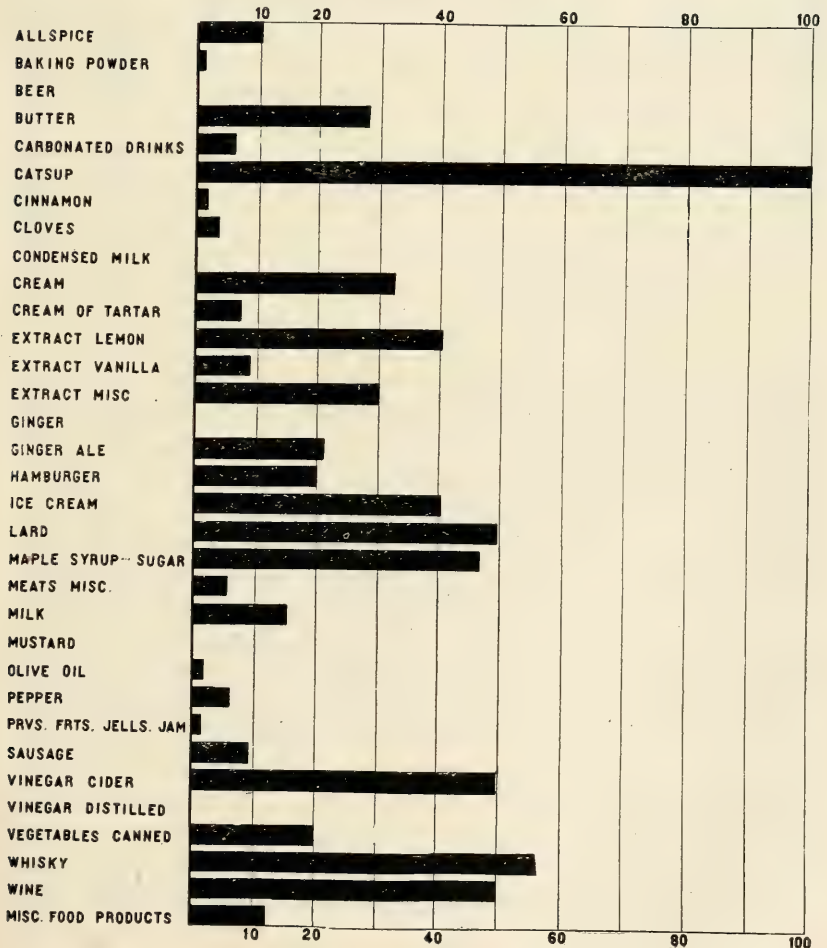
During the year 2,323 samples of food products, collected by the inspectors or sent in by health officers, have been analyzed. Of

this number 1,838 samples have been pure and 485 have not conformed to the legal standard of strength, or have borne misleading labels. This is equivalent to a percentage of adulteration of 20.8 per cent. The percentage of adulteration during 1906 was 42.3 per cent. Upon this basis of comparison the passage of the new Pure Food Law and its enforcement has resulted in a diminution in the quantity of adulterated food sold of 50.8 per cent.

The following summary gives in detail the character and variety of the work done, and the results:

PERCENTAGE OF ADULTERATION OF FOOD PRODUCTS IN INDIANA

YEAR ENDING SEPTEMBER 30, 1907



RESULTS OF ANALYSES OF FOOD SAMPLES.

Articles Examined.	Good.	Bad.	Total.	Per Cent. of Adulteration.
Allspice.....	43	5	48	10.5
Baking powder.....	8	1	9	1.1
Beer.....	14	0	14	0.0
Butter.....	85	33	118	27.9
Carbonated drinks.....	34	2	36	5.5
Catsup.....	0	7	7	100.0
Cinnamon.....	59	1	60	1.7
Cloves.....	27	1	28	3.6
Condensed milk.....	7	0	7	0.0
Cream.....	25	12	37	32.4
Cream of Tartar.....	38	3	41	7.3
Extract, lemon.....	25	17	42	40.5
Extract, vanilla.....	50	5	55	9.1
Extract, miscellaneous.....	7	3	10	30.0
Ginger.....	18	0	18	0.0
Ginger ale.....	7	2	9	22.0
Hamburger.....	24	6	30	20.0
Ice cream.....	103	70	173	40.4
Lard.....	90	89	179	49.7
Maple syrup and sugar.....	25	22	47	46.8
Meats, miscellaneous.....	51	3	54	5.5
Milk.....	638	116	754	15.3
Mustard.....	18	0	18	0.0
Olive oil.....	52	1	53	1.8
Pepper.....	85	5	90	5.5
Preserves: Fruits, jellies, jams.....	11	2	13	1.5
Sausage.....	147	15	162	9.2
Vinegar, cider.....	44	43	87	49.4
Vinegar, distilled.....	9	0	9	0.0
Vegetables, canned.....	16	4	20	20.0
Whisky.....	4	5	9	55.5
Wine.....	2	2	4	50.0
Miscellaneous food products.....	72	10	82	12.1
Total.....	1,838	485	2,323	20.8

MILK.

During the year 754 samples of milk have been analyzed, 116 of which, or 15.3 per cent., were adulterated or below the legal standard. These high figures are due to several conditions. Milk producers and distributors are still occasionally employing preservatives, either borax or formaldehyde; shortage of milk is sometimes the cause for the addition of water in an endeavor to make the supply meet the demand; the fat content is frequently below standard because of the fact that dealers take off a portion of the cream for favored consumers, and sell the remainder of the can for pure milk. These conditions, however, are but seldom met with, and so far as wilful violation of the law is concerned, we believe that as a class the farmers of the State do not attempt or wish to sell a milk that is not in full compliance with the law. From a sanitary standpoint, however, the milk supply is subject to most serious criticism. While coffee is graded according to a hundred different brands and sold at prices varying from ten cents to fifty cents a pound, the milk consumer appears to be satisfied with but one grade of milk

for which but one price must be paid. Consequently, the farmer producing sanitary high grade milk is compelled to sell his product in competition with that of the most slovenly and careless dairyman. The result has been that the milk producing industry has never set quality for its motto, but has used every effort to increase the quantity and lower the cost of production of its product.

Farmers engaged in the production of milk have apparently no idea of sanitation, and although the herds are well kept up and consist for the most part of high grade cows, producing milk above the average quality, yet the stables, milkhouses and all the details necessary for cleanly milk are neglected or but poorly observed. In many instances dairies are operated on leased farms. The buildings are dilapidated, and shiftlessness and poverty are apparent. It becomes a difficult matter for dairy inspectors to condemn buildings and close the business of milkmen who have invested their entire savings in a dairy, and it is particularly hard to do this when, because of the avarice of landlords, it is impossible to secure necessary repairs on the buildings. The health of the citizen of the State is of more importance, however, than the welfare of the individual farmer, and if the milk cannot be produced under sanitary conditions, it must not be produced at all. The plea of poverty and the refusal of the landlord to better conditions cannot be accepted as an explanation for unsanitary milk production. If it is impossible for the dairy interests at the present time to produce milk in a sanitary manner to retail at present prices, is it not advisable for the consumer to give the farmer such a price for his product that he can afford to abandon his present method of milk production, and produce clean, wholesome milk? Dr. Chas. Harrington, Secretary of the State Board of Health of Massachusetts, who has been conducting a crusade against dirty milk, has this to say of the situation: "The remedy is simple. We should insist upon clean milk and be willing to pay for it; encourage the production of a sanitary supply and refuse to buy excrement and pus; buy of the man whose supply costs a cent or two more a quart to produce, and let the sloven learn that cleanliness is an asset and filth a heavy load to carry."

MILK ANALYSES BY CITIES AND TOWNS.

Locality.	Total Number of Samples Collected.	Number Above Standard.	Number Below Standard.	Per Cent. Below Standard.	Per Cent. Total Solids in Lowest Sample.	Per Cent. Fat in Lowest Sample.
Anderson.....	6	4	2	33.3	11.73	2.2
Bedford.....	11	11	0	0.0		
Bloomington.....	13	11	2	15.3	11.07	
Brazil.....	7	6	1	14.2		2.5
Brooklyn.....	2	2	0	0.0		
Columbus.....	16	13	3	18.7	10.3	2.9
Connersville.....	9	8	1	11.1		3.1
Crawfordsville.....	26	16	10	38.4	12.07	2.8
Crown Point.....	2	2	0	0.0		
Danville.....	3	1	2	66.6	11.06	2.8
Delphi.....	4	4	0	0.0		
East Chicago.....	4	3	1	25.0		2.8
Elwood.....	5	4	1	20.0	11.63	2.9
Evansville.....	47	44	3	6.3	11.28	2.2
Fort Wayne.....	5	5	0	0.0		
Frankfort.....	13	6	*7	53.8		3.0
Gary.....	5	5	0	0.0		
Goshen.....	1	1	0	0.0		
Greencastle.....	9	9	0	0.0		
Greenfield.....	3	3	0	0.0		
Hammond.....	41	33	8	26.6	11.72	1.2
Huntington.....	1	1	0	0.0		
Indianapolis.....	128	120	8	6.2	11.41	1.4
Jeffersonville.....	9	7	2	22.2	9.93	2.6
Kokomo.....	15	11	4	26.6	5.00	.6
Lafayette.....	4	0	*4	100.0		
Lagrange.....	1	1	0	0.0		
Lawrenceburg.....	4	4	0	0.0		
Lebanon.....	1	1	0	0.0		
Linton.....	4	4	0	0.0		
Logansport.....	21	15	6	28.5		1.2
Madison.....	13	8	5	38.4		2.8
Marion.....	18	12	6	33.3	9.38	1.0
Martinsville.....	5	5	0	0.0		
Michigan City.....	11	11	0	0.0		
Mooresville.....	19	19	0	0.0		
Muncie.....	20	19	1	5.0		3.1
New Albany.....	52	42	10	19.0	5.54	2.9
North Salem.....	1	0	1	100.0		
Peru.....	8	8	0	0.0		
Plainfield.....	5	4	1	2.0		3.1
Plymouth.....	2	2	0	0.0		
Princeton.....	2	2	0	0.0		
Richmond.....	13	10	3	23.0		2.8
Rochester.....	1	1	0	0.0		
Rushville.....	3	3	0	0.0		
Salem.....	1	1	0	0.0		
Shelbyville.....	16	13	3	18.7	10.51	2.8
South Bend.....	95	87	8	8.4		3.0
Terre Haute.....	19	8	*11	57.8		2.4
Thorntown.....	1	1	0	0.0		
Tipton.....	3	3	0	0.0		
Vincennes.....	7	7	0	0.0		
Washington.....	2	2	0	0.0		
West Newton.....	5	5	0	0.0		
Whiting.....	6	4	2	33.3	10.87	2.5
Williamsport.....	4	4	0	0.0		
Worthington.....	2	2	0	0.0		
Fifty-eight cities.....	754	638	116	15.3+		

*Samples contained much dirt.

CREAM.

Thirty-seven samples of cream were analyzed, of which twelve, or 32.4 per cent. were classed as adulterated. This is due to the fact that the fat content fell below 18 per cent., the legal standard. A large quantity of cream is evidently still sold that should be classed as rich milk rather than as cream. We have found no evidences of cream thickeners such as viscogen, gelatin, etc., having been used.

CREAM—LEGAL.

Lab. No.	Retailer.	Fat Per Cent.
8401	Peter Eckersly, Muncie	30.00
8734	C. W. Trout, Logansport	20.50
8747	Ray & Arnold, Logansport	27.00
8904	Ballard Ice Cream Co., Indianapolis	27.00
8905	Ballard Ice Cream Co., Indianapolis	20.50
8908	H. O. Buzzard, Bloomington	25.60
8909	H. O. Buzzard, Bloomington	19.00
8917	Dr. Bond, Richmond	25.00
8919	Dr. Bond, Richmond	22.25
9320	, Marion	20.00
9417	Paul Adams, Indianapolis	21.00
9464	C. L. Hadley, Indianapolis	18.00+
9481	F. Altum, Indianapolis	23.00
9506	P. M. Adams, Indianapolis	19.00
9554	Trogden & Allen, Mooresville	20.00
9563	Brown & New, Plainfield	21.10
9564	R. C. Townsend, Mooresville	21.00
9588	Charles L. Bray, Valley Mills	19.00
9589	Black & Adams, Brooklyn	27.00
10149	D. F. Maish, Frankfort	18.00
10151	Ris Percy, Frankfort	18.00
10160	A. N. Daywatte, Frankfort	18.00
10376	Minton & Strodling, Muncie	24.80

CREAM—ILLEGAL.

Lab. No.	Retailer.	Fat.	Remarks.
7112	James Gaul, Anderson	15.0	Adulterated and below standard.
7296	Richmond Cream Co., Richmond	18.5	Guaranteed to be 20 %.
7495	W. N. Trullender, Muncie	17.0	Below standard.
7542	, Indianapolis	16.1	Below standard.
8178	, Valparaiso	15.5	Formaldehyde present in large quantities.
8514	Charles Prang, Ft. Wayne	17.0	Below standard.
9020	Louis H. Long, Terre Haute	17.8	Below standard.
9265	Clover Leaf Creamery, Marion	16.0	Below standard.
9480	C. L. Hadley, Plainfield	14.0	Below standard.
9565	C. L. Hadley, Plainfield	14.0	Adulterated.
10365	O. P. Jones, Muncie	15.6	Below standard.
10369	S. D. Frier, Muncie	16.8	Below standard.
10233	Chamberlain & Son, Lafayette	22.0	Much dirt present.
10236	M. Chamberlain & Son., Lafayette	29.0	Much dirt present.

BUTTER.

Of the 118 samples of butter analyzed, 85 have been pure and 33 adulterated. This is equivalent to an adulteration of 27.9 per cent. These figures include the results of an examination of the character of butters served in restaurants in the city of Indianapolis, where of 71 samples collected, 31 were found to be not butter but oleomargarine. There is still a great deal of oleomargarine and renovated butter sold under the name of butter in spite of the rigid Federal laws. The price of butter has been uniformly high throughout the year, and the temptation of the unscrupulous dealer to substitute a product which he can buy cheaply and sell at a high price has been great. There is evidently some butter on the market to which oleomargarine has been added in small quantities, and it is apparent that if the present prices of butter continue, the incentive to fraud will be maintained.

BUTTER—LEGAL.

Lab. No.	Retailer.	Butyro Reading at 40° C.	Reichert-Meißl Number.
6997	J. M. Carvin & Son, Indianapolis.	42.15	23.4
6999	Columbia Grocery Co., Indianapolis.	42.60	23.6
7000	Indianapolis.	41.00	25.2
7001	Mrs. M. J. Gurley, Indianapolis.	42.35	24.8
7005	J. M. Williamson, Indianapolis.	42.70	22.8
7006	Standard Tea & Coffee Co., Indianapolis.	43.00	22.8
7009	Cook Co., Indianapolis.	40.30	31.4
7017	C. H. & E. H. Schrader, Indianapolis.	41.40	24.2
7026	Indianapolis.	42.00	23.6
7054	Glick Sons, Indianapolis.	42.00	22.2
7056	F. G. Chadwick, Indianapolis.	42.85	19.8
7060	Stand No. 14 Market House, Indianapolis.	42.40	24.8
7061	Stand No. 248 Market House, Indianapolis.	42.45	23.0
7062	Stand No. 75 Market House, Indianapolis.	41.90	25.0
7063	Cobb & Tracy, Indianapolis.	43.15	22.0
7064	W. W. Day, Indianapolis.	41.75	24.4
7065	E. V. Darnell, Indianapolis.	42.36	23.0
7067	Mrs. S. M. Miller, Indianapolis.	41.70	24.0
7075	Benj. C. Swan & Son, Indianapolis.	42.60	24.4
7076	Harry A. Marley, Indianapolis.	42.80	24.2
7110	Moore Grocery Co., Indianapolis.	43.00	19.4
7111	B. B. Petit, Anderson.	41.60	23.8
7124	Gus Vergang, Indianapolis.	43.00	23.4
7197	Thornstown.	42.20	
7300	Bee Hive Grocery Co., Richmond.	43.00	26.6
7301	Richmond Cream Co., Richmond.	43.00	26.1
7468	Indianapolis.	42.80	28.6
7623	Mrs. F. T. Smith, Indianapolis.	43.35	23.4
7667	Louis Valnitz, Indianapolis.	41.90	27.6
7668	A. Spreng, Indianapolis.	41.00	25.8
7765	Stegemeier Bros., Indianapolis.	42.50	27.6
7812	L. S. Ayres & Co., Indianapolis.	41.8	26.1
7833	Taggarts, Indianapolis.	43.0	29.2
7835	Glen Alba, Indianapolis.	42.4	26.7
7840	Marion Cafe, Indianapolis.	42.2	27.6
7842	Wm. H. Smith, Indianapolis.	43.0	27.1
7843	Frank V. Schrottkey, Indianapolis.	43.0	28.0
7910	J. W. Cunningham, Indianapolis.	42.3	29.4
8131	J. M. Kenady, Irvington.	41.65	27.1
8138	Barnes & Marshall, Whitestown.	41.25	27.4
8141	Wm. D. McGuire, Zionsville.	43.7	29.5
8181	Busy Bee Restaurant, Indianapolis.	42.45	
8182	Baltimore Dairy Lunch, Indianapolis.	42.4	30.6

BUTTER—LEGAL—Continued.

Lab. No.	Retailer.	Butyro Reading at 40° C.	Reichert- Meissl Number.
8185	Taggarts, Indianapolis.	42.65	26.3
8187	Claypool Cafe, Indianapolis.	42.3	25.6
8232	Jess Hammond, Evansville.	41.75	28.5
8242	Wm. E. Burgess, Kirklín.	43.5	28.4
8248	Richard C. Garham, Kirklín.	42.8	35.6
8270	Sharpe & Morris, Dayton.	41.8	30.6
8357	Schrader, Indianapolis.	41.7	29.3
8469	Alva Wellman, New Albany.	42.6	25.1
8486	Chas. Etmier, Logansport.	42.7	27.6
8480	Louis Diechmann, Logansport.	43.3	25.8
8740	F. W. Klein, Logansport.	42.7	28.3
9272	W. J. Bick, Marion.	44.3	26.8
9098	John Fissel & Co., Ft. Wayne.	43.2	25.4
9095	Harry Hockemeir, Ft. Wayne.	42.7	27.4
9096	Henry Hockemeir, Ft. Wayne.	44.3	25.6
9000	J. P. Hinton, Ft. Wayne.	44.5	26.4
9101	J. A. Riley, Ft. Wayne.	43.7	26.0
9104	J. B. Welten, Ft. Wayne.	43.3	27.3
9105	John Vodermarks, Ft. Wayne.	42.4	29.5
9106	Diltoe Grocery Co., Ft. Wayne.	44.6	25.2
9107	Oscar Wobock, Ft. Wayne.	44.6	27.8
9108	D. M. Koble, Ft. Wayne.	44.4	27.4
9109	Val Hartman, Ft. Wayne.	44.5	28.6
9110	Kennedy & Darby, Ft. Wayne.	42.4	28.9
9111	T. W. Scobold, Ft. Wayne.	43.1	27.5
9137	Kelly & Allman, Peru.	43.2	27.6
9145	S. W. Smith, Peru.	43.7	25.0
9152	Glennon & Wendt, Peru.	43.1	28.8
9267	J. W. Monaghan, Marion.	44.4	25.5
9268	Denison Hotel Co., Marion.	44.5	28.1
9269	Turner Overman, Marion.	44.3	29.1
9271	George A. Keifer, Marion.	45.0	30.4
9273	Wm. Hilsamer, Marion.	43.0	28.5
9279	Homer Watson, Marion.	42.7	26.8
9656	F. Hassler & H. Cretter, Connersville.	41.8	28.5
9663	M. Wenger & Son, Connersville.	42.8	24.6
9776	L. T. Smith, South Bend.	42.8	25.1
9796	Brodbeck Bros., South Bend.	43.4	25.9
9803	Salinger Bros., South Bend.	42.9	27.8
9983	The Traders' Palace Grocery, Plymouth.	43.7	24.6
10079	R. A. Ebert, Michigan City.	43.6	24.7
10338	Dr. J. Cooperider, Madison.	42.9	26.3

BUTTER—ILLEGAL.

Lab. No.	Dealer.	Butyro Reading @ 40° C.	Reichert- Meissl Number.	Remarks.
7785	Mrs. Elizabeth Anglus, Evansville.	48.3	1.40	Oleomargarine.
7838	Ryker's Restaurant, Indianapolis.	49.0	.86	Oleomargarine.
8124	_____, South Bend.	49.25	.94	Oleomargarine.
8186	_____, Indianapolis.	50.0	1.05	Oleomargarine.
7003	Nathan B. Groff, Indianapolis.	49.55	1.12	Oleomargarine.
7830	Joe's Restaurant, Indianapolis.	50.3	1.24	Oleomargarine.
7107	Mrs. E. P. Reidinan, Indianapolis.	47.0	8.20	Oleomargarine.
7836	Miles Restaurant, Indianapolis.	52.15	.79	Oleomargarine.
8183	Horace Haynes, Indianapolis.	48.5	1.58	Oleomargarine.
7831	Little Denison, Indianapolis.	51.5	1.14	Oleomargarine.
7770	Bond's Restaurant, Indianapolis.	49.1	1.43	Oleomargarine.
8195	"Abe Martin" Restaurant, Indianapolis.	48.6	2.14	Oleomargarine.
8184	The Oak, Indianapolis.	51.3	.84	Oleomargarine.
8193	National Restaurant, Indianapolis.	51.5	.96	Oleomargarine.
8190	Norman Restaurant, Indianapolis.	49.2	1.04	Oleomargarine.
7841	Thayer's Restaurant, Indianapolis.	52.35	.51	Oleomargarine.
7837	Smith's Restaurant, Indianapolis.	48.50	1.91	Oleomargarine.
8191	Princeton Hotel and Restaurant, Indianapolis.	48.9	1.22	Oleomargarine.
7844	Rosso's Cafe, Indianapolis.	51.8	1.18	Oleomargarine.
7834	Schiffman Coffee House, Indianapolis.	51.8	1.56	Oleomargarine.

BUTTER—ILLEGAL—Continued.

Lab. No	Dealer.	Butyro Reading @ 40° C.	Reichert-Meissl Number.	Remarks.
7829	B. M. Covert, Indianapolis.....	49.0	1.24	Oleomargarine.
8192	Illinois Cafe, Indianapolis.....	49.3	4.10	Oleomargarine.
8194	Born's Restaurant, Indianapolis.....	48.35	1.25	Oleomargarine.
7839	Born's Restaurant, Indianapolis.....	49.2	.94	Oleomargarine.
7832	Foster-Fowler Restaurant, Indianapolis.....	49.0	.79	Oleomargarine.
7813	Merchants' Restaurant, Indianapolis.....	51.9	.46	Oleomargarine.
6984	J. M. Williamson, Indianapolis.....	42.50	19.00	Mixed with oleomargarine
6985	, Indianapolis.....	49.10	2.00	Oleomargarine.
6998	Chas. Railsback, Indianapolis.....	48.05	5.60	Oleomargarine.
7002	Mont. Williamson, Indianapolis.....	48.65	.66	Oleomargarine.
7004	Wm. H. Elikor, Indianapolis.....	49.50	1.23	Oleomargarine.
7108	Mary E. Doolittle, Indianapolis.....	48.20	6.40	Oleomargarine.
10231	American Dairy Co., Indianapolis.....	46.10	8.22	Oleomargarine.

OLEOMARGARINE.

But five samples of oleomargarine have been analyzed, all of which have been pure. The use of oleomargarine as a butter substitute is on the increase, but manufacturers have at last begun to realize the great value of their product as a legitimate article of food. While it has been sold largely in years past, much of it has not been sold under its true name, but under the guise of butter. Now that its value as a wholesome and cheap substitute for butter is becoming well known, it is evident that it will find an ever increasing demand under its true name.

CONDENSED MILK.

All of the seven samples of condensed milk analyzed were pure. There is still some old stock on the market labeled "Evaporated Cream," but all new goods are properly branded. It is an interesting fact that condensories manufacturing condensed milk products insist upon a far higher grade of milk than do the consumers, in spite of the fact that all condensed milk is thoroughly sterilized by heat, while the consumer generally uses his milk raw. The fact that the condensory can obtain from the dairyman a high grade milk free from odor and filth, and with a low bacterial count, simply by insisting that only such milk shall be delivered at the factory platform, is an indication of what may be obtained in the way of improvement from the producer of dairy milk.

CONDENSED MILK—LEGAL.

Lab. No.	Brand.	Manufacturer.	Per Cent. Fat.	Per Cent. Fat in Original Milk.	Solids.	Ash.	Number of Times Condensed.
7771	Highland.....	Helvetia Milk Con. Co., Highland, Ill....	9.0	4.20	31.50	1.5	2.14
7773	Van Camp's....	Van Camp Packing Co., Indianapolis....	8.0	3.74	32.00	1.5	2.14
7774	Star.....	Michigan Condensed Milk Co., N. Y.	7.7	3.62	29.80	1.5	2.14
7775	Pet.....	Helvetia Milk Con. Co., Highland, Ill....	8.0	3.74	29.53	1.5	2.14
7779	Modimilk.....	Inland Milk Lab. Co., Indianapolis.....	14.0	7.77	42.50	1.25	1.8
7772	Eagle.....	Bordens Cond. Milk Co., New York.....	10.8	4.39	92.56	1.72	2.46
8444	.....	....., Indianapolis.....	10.4	3.15	41.81	2.36	3.3

ICE CREAM.

The standard of ice cream for this State reads as follows: "Ice cream is a frozen product containing not less than 8 per cent. of butter fat and 18 per cent of milk solids, with the addition of sugar (sucrose) and with or without natural flavoring and not to exceed seven-tenths of one per cent. of gelatine." This standard was adopted after consultation with manufacturers representing a large proportion of the trade in the State, and while the fat standard is much below that required by the Federal statute, yet it is sufficiently high to insure a wholesome and palatable product. When it appears that the standard is one suggested by the manufacturers themselves as being entirely fair to the trade and to the consumer, it is surprising to find that of the 173 samples analyzed but 103 were up to standard, while 70, or 40.4 per cent., were below standard. These results evidently indicate an indisposition on the part of the manufacturer to abide by standards adopted at his own request.

ICE CREAM—LEGAL.

Lab. No.	Manufacturer or Dealer.	Fat Per Cent.
8225	Furnas, Indianapolis.....	9.2
8322	C. W. Craig, Indianapolis.....	8.4
8323	Ballard Ice Cream Co., Indianapolis.....	8.0
8341	Ballard Ice Cream Co., Indianapolis.....	8.4
8343	Browder Ice Cream Co., Indianapolis.....	8.2
8346	Ballard Ice Cream Co., Indianapolis.....	8.0
8347	New York Candy Kitchen, Marion.....	12.4
8368	New York Candy Kitchen, Marion.....	13.8
8404	J. Turischi, Muncie.....	8.0
8420	W. A. Heath, Labanon.....	8.7
8509	Wm. F. Geller, Ft. Wayne.....	8.0
8510	Wm. F. Geller, Ft. Wayne.....	8.4
8511	Collins Ice Cream Co., Huntington.....	11.2
8513	John Vazenios, Ft. Wayne.....	9.6
8516	Geo. T. Pantazzen, Ft. Wayne.....	8.0
8519	Mondamin Dairy Co., Ft. Wayne.....	6.8
8594	Harry L. Sharp, Delphi.....	8.0
8595	Edw. H. Danie, Delphi.....	8.6

ICE CREAM—LEGAL—Continued.

Lab. No.	Manufacturer or Dealer.	Fat Per Cent.
8729	Ballard Ice Cream Co., Indianapolis.	9.2
8777	Mackley & Harkness, Terre Haute.	11.6
8811	J. D. Boss, Columbus.	10.6
8816	Demos Bros., Columbus.	8.4
8817	Ballard Bros., Indianapolis.	8.4
8819	Columbus Ice Cream Co., Columbus.	10.0
8880	Wm. Hayes, Franklin.	8.4
8881	R. C. Wood, Franklin.	8.8
8937	Buntin Drug Co., Terre Haute.	8.6
8963	Paul Scaetna, Hammond.	9.0
9050	Dora B. Smoot, Washington.	10.0
9055	Sum & Bros., Washington.	10.+
9056	Chas. H. Jones, Washington.	10.2
9057	J. Harry Drew, Washington.	11.+
9115	Clark Bros., Salem.	8.8
9116	L. E. Taylor, Salem.	11.2
9119	D. H. Ewing & Son, Salem.	8.0
9121	John B. Clarke, Salem.	10.6
7121	Jno. G. Dold, Noblesville.	8.0
7122	H. F. Heiny & Co., Noblesville.	8.0
7080	R. W. Furnas, Indianapolis.	8.0
7198	Floyd Marshall, Martinsville.	8.0
7317	Collins Ice Cream Co., Huntington.	9.2
7318	Collins Ice Cream Co., Huntington.	16.0
7399	Jersey Creamery Co., Elwood.	9.0
7452	Smith, Plainfield.	12.0
7496	J. R. Hummel, Muncie.	11.0
7497	Chas. E. Hinkley, Muncie.	11.0
7498	D. P. Campbell, Muncie.	8.+
7989	R. W. Furnas, Indianapolis.	8.4
8167	Purity Ice Cream Co., Evansville.	8.8
8168	Evansville Pure Milk Co., Evansville.	8.3
8871	Ballard Ice Cream Co., Indianapolis.	10.2
8872	Jessup & Antrum, Indianapolis.	8.0
9069	Buntin Drug Co., Terre Haute.	13.0
9162	J. Dickman, Peru.	8.0
9199	Early's Drug Store, Greenfield.	8.0
9200	Small's Drug Store, Greenfield.	12.4
9201	A. C. Pilkerton, Greenfield.	8.0
9202	— Pugh, Greenfield.	9.6
9262	A. L. Paxson, Marion.	8.0
9264	A. L. Paxson, Marion.	8.4
9388	George F. Goodbub, New Albany.	12.0
9389	Herman Kaiser, New Albany.	10.6
9389	Peter Pfeffer, New Albany.	9.6
9390	John Haffen, New Albany.	10.0
9620	Richard Floys, Shelbyville.	12.0
9621	H. Hagerhorst, Shelbyville.	11.0
9622	Mike Switow, Shelbyville.	11.0
9623	Charles Pittman, Shelbyville.	12.0
9633	Edward Small, Shelbyville.	11.0
9644	George Demas, Connorsville.	10.5
9765	Jesse McAnally, Greencastle.	8.0
9766	Owl Drug Co., Greencastle.	10.0
9784	New York Candy Kitchen, South Bend.	12.0
9785	Nobile's, South Bend.	10.0
9787	O. Mennucci, South Bend.	8.0
9788	J. Z. Turner, South Bend.	9.0
9789	H. E. Matteson, South Bend.	9.0
9822	Shannon & Fast, Brazil.	8.0
9936	Louis Nebeker, Covington.	14.0
9937	Charles Rennan, Crawfordsville.	8.0
9947	Coleman, Crawfordsville.	10.0
.....	Fosdick Ice Cream Co., Crawfordsville.	9.6
9950	W. W. Meyer, Crawfordsville.	12.0
9951	J. C. Wampler, Crawfordsville.	11.4
9962	Furnas Ice Cream Co., Indianapolis.	8.9
9965	W. D. Epperson, Latayette.	10.0
10059	Otto Albert, Plymouth.	10.0
10061	Schlusser Bros., Plymouth.	10.8
10114	George Lensch, Michigan City.	10.0
10136	Ed. Hallett, Princeton.	14.0
10182	George Chopers, Anderson.	10.5
10183	Hughes & Jones, Anderson.	18.0
10184	W. H. Larmore, Anderson.	8.4
10115	J. Alexander, Michigan City.	9.5

ICE CREAM—LEGAL—Continued.

Lab. No.	Manufacturer or Dealer.	Fat Per Cent.
10209	Standard Ice Cream Co., South Bend	8.8
10210	Charles Gionri, South Bend	8.8
10211	E. Polander, South Bend	12.0
10217	Sbragia & Bardelli, Hammond	8.6
10218	Summer's Drug Store, Hammond	8.4
10223	Bicknell Drug Co., Hammond	8.4
10224	Brahos Bros., Hammond	12.4
10225	Woodhull Ice Cream Co., Hammond	9.2
10367	Campbell Ice Cream & Milk Co., Muncie	11.2

ICE CREAM—ILLEGAL.

Lab. No.	Manufacturer.	Fat Per Cent.
7057	R. W. Furnas, Indianapolis	6.4
7058	R. W. Furnas, Indianapolis	6.9
7059	R. W. Furnas, Indianapolis	6.0
7068	R. W. Furnas, Indianapolis	6.0
7069	R. W. Furnas, Indianapolis	6.8
7070	R. W. Furnas, Indianapolis	7.0
7071	Ballard & Co., Indianapolis	6.0
7078	R. W. Furnas, Indianapolis	7.0
7079	Browder Ice Cream Co., Indianapolis	6.0
7097	R. W. Furnace, Indianapolis	6.0
7127	_____, Indianapolis	7.2
7132	Sanders Smith, Plainfield	3.5
7191	_____, Indianapolis	6.8
7192	_____, Indianapolis	6.8
7316	_____, Huntington	4.4
7319	_____, Huntington	4.4
7546	R. W. Furnas, Indianapolis	6.2
8068	Evansville Pure Milk Co., Evansville	5.4
7866	Spragial Bardette, Hammond	7.4
8283	John Tevebaugh, Crawfordsville	6.6
8324	Wm. & Harry Birk, Indianapolis	7.2
8325	Kinzer, Indianapolis	1.0
8338	Will R. Coleman, Crawfordsville	7.0
8342	Fassati & Son, Indianapolis	7.6
8344	Indianapolis	7.8
8345	Stokes Bros., Indianapolis	7.4
8402	W. H. Sverfert, Muncie	7.0
8446	_____, Crawfordsville	7.4
8447	_____, Crawfordsville	7.6
8448	_____, Crawfordsville	6.8
8572	Will Bock, Indianapolis	6.4
8818	Lay Bros., Columbus	7.8
8900	_____, Hymera	4.8
8958	Fragie Bardelli, Hammond	7.0
8961	Bicknell & Co., Hammond	7.6
8962	Summers & Shansole, Hammond	7.6
9026	Sage Bros., Terre Haute	7.0
9028	Terre Haute	7.0
7597	Cold Storage Ice Cream Co., Marion	5.6
8778	Greek Candy Kitchen, Terre Haute	4.0
8779	Yeager & Rigney, Terre Haute	5.0
8781	Vigo Commission Co., Terre Haute	4.4
8984	Pear Ice Cream Co., Terre Haute	3.6
8783	Furnas Ice Cream Co., Terre Haute	6.8
8982	Buntin Drug Co., Terre Haute	4.4
8983	Peter Georgapoulos, Terre Haute	5.4
8780	John J. Roumeliate, Terre Haute	7.0
8782	Jos. Alexander & Co., Terre Haute	3.2
8778	Greek Candy Kitchen, Terre Haute	4.0
8982	Buntin Drug Co., Terre Haute	4.4
8783	Furnas Ice Cream Co., Terre Haute	6.8
8984	Pear Ice Cream Co., Terre Haute	3.6
8781	Vigo Commission Co., Terre Haute	4.4
8779	Yeager & Rigney, Terre Haute	5.0
7597	Marion Cold Storage & Ice Cream Co.	5.6
8364	A. A. Boller & Co., Marion	†10.8

†Starch present.

ICE CREAM—ILLEGAL—Continued.

Lab. No.	Manufacturer.	Fat Per Cent.
8365	Hildebrand & Ansley, Marion	7.6
8366	Hildebrand & Ansley, Marion	18.6
8363	Marion Ice Cream Co., Marion	8.4
9123	Guy Neal, Salem	7.6
8815	Greek Candy Co., Columbus	6.6
9160	Wm. E. Exmyer, Peru	7.4
9258	J. D. Sniders, Marion	6.2
9263	A. J. Paxson, Marion	7.6
9322	....., Marion	7.6
9642	O. Elliott, Connersville	7.0
9786	E. Poledor, South Bend	*14.0
9820	James Tarafonetes, Brazil	6.0
9821	Marvie Jones, Brazil	5.6
9823	Joseph Spugnardi, Brazil	6.8

*Colored pink with coal tar color.

LEMON EXTRACT.

Two classes of lemon extract are recognized as legal—those containing 5 per cent. of oil of lemon dissolved in alcohol and free from artificial color, and the so-called “Turpeneless” goods prepared by shaking oil of lemon with dilute alcohol, or by dissolving turpeneless oil of lemon in alcohol and containing not less than 2 per cent. of citral derived from oil of lemon. The character of lemon extracts has greatly improved during the year. Of 42 samples analyzed, 25 have been up to strength and true to name, and 17 have been either below standard or mislabeled. This is a great improvement over the results reported a year ago, when 85 per cent. of the lemon extracts examined were adulterated.

LEMON FLAVORING EXTRACTS—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lemon Oil.	Color.
7105	Meyer Bros., St. Louis.	5.1	Colorless.
7107	Meyer Bros., St. Louis.	6.9	
7168	Schnull & Co., Indianapolis.	5.75	Colorless.
7175	Royal Remedy and Extract Co., Dayton, O.	5.06	Colorless.
7367	J. H. Conner & Co., New Albany	7.87	Natural.
7369	....., New Albany	4.18	Natural.
7440	Robertson Drug Co., Salem	7.06	Not natural.
7449	A. J. Redding, Anderson	5.62	Colorless.
7460	Wm. C. Pfau, Jeffersonville	6.25	Natural.
7518	Eddy & Eddy, St. Louis.	5.62	Colorless.
7557	Jennings Flavoring Co., Grand Rapids	*	Colorless.
7559	L. D. Bryon, Mulberry	5.62	Colorless.
7634	Chas. D. Knoefel, New Albany	5.37	Natural.
7715	Firchuff Bros., Whiting	6.43	Colorless.
7968	Norris & Sieger, Frankfort	5.87	Artificial.
7983	Campbell & Masters, Lebanon	6.68	Natural.
8058*	G. W. Tepe, Evansville	0.34	Natural.
8092*	Fisher Bros., Evansville	1.00	Colorless.
8135	Markland & Harshburger, Whitestown	5.31	Natural.
8300	E. Eierhaue & Sons, Vincennes	5.93	Colorless.
8308	Dierhaue Bros., Vincennes	6.31	Not natural.
8326	Will R. Coleman, Crawfordsville	7.00	Natural.
8390†	F. Furlmeyer, Vincennes	0.43	Dinitroresol.
8459	Moses Barnett, Evansville	7.25	Slightly colored.
9192	Fred R. Widmer, Dayton	6.66	Colorless.

*Labeled correctly “Turpeneless.”

†Labeled correctly.

LEMON FLAVORING EXTRACTS—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Lemon Oil.	Color.	Remarks.
7152	Royal Remedy & Extract Co., Dayton, O.	0.18	Naphthol yellow.	Artificial.
7183	W. W. Jones, Greencastle.	1.81	Natural.	Below standard.
7218	Royal Remedy & Extract Co., Dayton, O.	0.0	Naphthol yellow.	Artificial.
7373	C. D. Knoefel, New Albany.	0.62		Artificial.
7469	E. R. Webster & Co., Cincinnati.	3.50	Naphthol yellow.	Below standard.
7470	Lafayette Chemical Works, Lafayette.	0.0	Tropaeolin.	Artificial.
7471	Indianapolis.	0.12	Naphthol yellow.	Artificial.
7553	Gem Extract Co., Frankfort.	0.0	Not natural.	Artificial.
7747	J. F. Bruning & Son, Evansville.	4.93	Colorless.	Below standard.
8007	Seeley Mfg. Co., Detroit.	0.34	Dinitrocresol.	Artificial.
7555	W. M. Shafer & Co., Frankfort.	0.18	Naphthol yellow.	Below standard.
8859	John R. Grave, Columbus.	0.25	Coal tar color.	Adulterated.
9360	L. W. Owens, Boonville.	2.81	Artificial.	Adulterated.
9768	Geo. A. Bayle, St. Louis, Mo.	0.31	Naphthol yellow.	Adulterated.
9861	Green's Pharmacy, Irvington.	1.5		Adulterated.
10120	D. K. Evans & Co., St. Louis.	0.0	Coal tar color.	Mislabeled.

VANILLA EXTRACT.

We have examined 55 samples of vanilla extract and found 50 to be pure and 5, or 9.1 per cent., adulterated, below the standard or misbranded. The improvement in vanilla extract is even more marked than in the case of lemon extracts. At the present time almost no goods are found on the market not true to name, unless it is on the back shelf of the grocery store, and these old goods are rapidly being thrown away to make room for better products.

VANILLA EXTRACTS—LEGAL.

Lab. No.	Brand.	Manufacturer or Retailer.	Vanillin.	Coumarin.	Caramel.
7021		F. A. Voght, Indianapolis.	.30	None.	Present.
7031		Louis E. Haag, Indianapolis.	.0625	None.	Present.
7103	Daisy.	—, St. Louis.	.10	Present, labeled correctly	Present.
7104	Perfect.	—, St. Louis.	.125	None.	Present.
7119		A. G. Baldwin, Noblesville.	.05		Present.
7117		H. E. Heiny, Noblesville.	.18	None.	Present.
7169		O. E. Tower, Martinsville.	.242	None.	None.
7219	Souders.	Royal Remedy & Extract Co., Dayton, O.	.10	None.	None.
7368		J. H. Conner & Co., New Albany.	.205	None.	None.
7378		Henry J. Huder, Indianapolis.	.068	None.	None.
7398		Henshaw & Hughes, Elwood.	.062	None.	None.
7400		Crown Cordial Extract Co., New York.	.200	None.	Present.
7450		A. J. Redding, Anderson.	.0588	None.	Present.
7517	Eddy's.	Eddy & Eddy, St. Louis.	.032	None.	None.
7522		C. R. Mills, Lawrenceburg.	.068	None.	None.
7536		Galleher & Prutzman, Muncie.	.2076	None.	None.
7551	Strong's.	Terre Haute Coffee & Spice Mills.	.035	None.	None.
7554	Rose Bud.	McDowell, Britton & Church, Frankfort.	.120	None.	None.
7556	Double Concentrated.	Jennings Flavoring Ext. Co., Grand Rapids.	.035	None.	Present.
7572		C. E. Abel, Seymour.	.037	None.	None.
7746		J. F. Bruning & Son, Evansville.	.12	None.	None.
7945*		J. H. Danley, Lafayette.	.200	Present.	None.
7948	Conkle's.	Grocers' Supply Co., Indianapolis.	.075	None.	None.
7960		J. D. Bartlett, Lafayette.	.050	None.	None.
7965		S. F. Baker & Co., Keokuk, Iowa.	.2188	None.	None.
7969	Rose Bud.	Norris & Sieger, Frankfort.	.160	None.	None.
7973	Standard.	Gillett Chemical Works, Chicago.	.100	None.	None.

*Labeled "Compound."

VANILLA EXTRACT—LEGAL—Continued.

Lab. No.	Brand.	Manufacturer or Retailer.	Vanillin.	Coumarin.	Caramel.
7975	Monarch.....	Reid, Murdock & Co., Chicago.....	.062	None...	None.
7980		Fred Combs, Lebanon.....	.050	None...	None.
8010	Judson.....	Siess Bros., Arcadia.....	.025	None...	None.
8011	Seely's.....	Siess Bros., Arcadia.....	.124	None...	None.
8061		William Fritsch, Evansville.....	.150	None...	None.
8136	Whitecap.....	Heekin Spice Co., Cincinnati.....			
8206		L. W. Holmes & Co., Indianapolis.....	.070	None...	None.
8220		C. A. Gable, Indianapolis.....	.070	None...	None.
8251		Star Drug Store, Lebanon.....	.050	None...	None.
8301		Thompson & Taylor Co., Chicago.....	.22	None...	None.
8309		Thompson & Taylor Co., Chicago.....	.150	None...	None.
8329		Eli Myers, Crawfordsville.....	.170	None...	None.
8387		E. W. Fillett Co., Chicago.....	.125	None...	None.
8460		Moses Barnett, Evansville.....	.062	None...	None.
8577		R. W. Snyder, Battle Creek, Mich.....	.184	None...	None.
8645	XXXX.....	McCullough Drug Co., Lawrenceburg.....	.143	None...	None.
8750		J. F. Coulson, Logansport.....	.117	None...	None.
8936	Pure.....	Atlantic Importing Co., New York.....	.162	None...	None.
9175	Souder's.....	Royal Extract & Remedy Co., Dayton.....	.238	None...	None.
9794	Trojan.....	John H. Tolman & Co., Chicago.....	.086	None...	Present.
9176	Souder's.....	Royal Remedy & Extract Co., Dayton.....	.227	None...	None.
9177	Souder's.....	Royal Remedy & Extract Co., Dayton.....	.149	None...	None.
9204		Amos Gipe, Wabash.....	.080	None...	None.
9205		Amos Gipe, Wabash.....	.300	None...	None.
9206		Amos Gipe, Wabash.....	.112	None...	None.
9338		Gem Extract Co., Frankfort.....	.120	None...	None.
9339		Gem Extract Co., Frankfort.....	.200	None...	None.
7961*		J. D. Bartlett, Lafayette.....	.250	Present...	Present.

*Labeled "Compound."

EXTRACT OF VANILLA—ILLEGAL.

Lab. No.	Manufacturer or Dealer.	Vanillin.	Coumarin.	Caramel.	Remarks.
7226	McCoy Drug Co., French Lick.....	.27	.04%....	Present...	Adulterated.
8256	....., Indianapolis.....		None...	None...	Below standard.
7612	Brown Extract Co., Indianapolis.....	.4996	None...	Present...	Largely vanillin.
7184	A. G. Keheler, Danville.....	.025			Below standard.
8094	J. C. Stark, Evansville.....	.240	None...	None...	Artificial color.

MISCELLANEOUS EXTRACTS.

The character of miscellaneous extracts is improving just as is the case with the standard extracts. These products have been heretofore classed as illegal because of misbranding. At the present time the trade is conforming to the law and branding the synthetic products artificial fruit flavors instead of pure fruit extracts.

MISCELLANEOUS EXTRACTS—LEGAL.

Lab. No.	Article.	Manufacturer.	Oil.	Color.
7366	Extract Orange.....	J. H. Conner & Co., New Albany.....	6.03	Natural.
7552	Extract Orange.....	Terre Haute Coffee & Spice Mills.....	6.0	Not natural.
7949	Extract Raspberry.....	Lafayette Chemical Works, Lafayette.....		Properly labeled.
9932	Extract Orange.....	E. C. Harley Co., Dayton, O.....	5.85	
8093	Extract Banana.....	Gro. Chemical Works, Evansville.....		
8643	Orange Flavor.....	McCullough Drug Co., Lawrenceburg.....		
8644	Strawberry Flavor.....	McCullough Drug Co., Lawrenceburg.....		

MISCELLANEOUS EXTRACTS—ILLEGAL.

Lab. No.	Article.	Brand.	Manufacturer.	Remarks.
7564	Strawberry Fruit Flavor.	Zipp's Strawberry Fruit Flavor.....	Zipp Mfg. Co., Cleveland	Benzoic acid. Adulterated; not an extract.
7934	Raspberry Extract.....	.....	C. F. Hurley, Lafayette.	
8267	Extract Orange.....	.....	Anderson R. Garrett, Mechanicsburg.....	Not an extract.

MEAT PRODUCTS.

SAUSAGES, PRESSED MEATS, HAMBURGER STEAK, ETC.

Great improvement is noticed in the character of the prepared meats sold throughout the State. The use of preservatives has largely been abandoned. Of the 246 samples of all meat products analyzed, 222 have been pure and 24 adulterated by the use of either borax or the sulphites.

SAUSAGE—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
7390	Weichner & Arand, Elwood.	8171	Louis Vollroth, Indianapolis.
7396	Bicknell & Mahan, Elwood.	8172	H. Arnold, Indianapolis.
7502	H. C. Adams, Muncie.	8176	I. Gibson, Indianapolis.
7403	Ed. D. Donner, Restaurant, Indianapolis.	8212	Glick & Shane, Indianapolis.
7404	Frank S. Born, Indianapolis.	8213	J. P. Seiscoc, Indianapolis.
7405	Otto Boettcher, Indianapolis.	8215	C. Baumbach, Indianapolis.
7409	Edw. P. Reynolds, Indianapolis.	8216	R. S. Muller, Indianapolis.
7410	Fred Yorger, Indianapolis.	8224	Chas. R. Steidle, Indianapolis.
7411	James Whiteley, Indianapolis.	8241	Chas. A. Underwood, Kirklm.
7412	Horace Brandenburg, Indianapolis.	8327	Frank Fink, Crawfordsville.
7414	Chester E. Wright, Indianapolis.	8332	Phillip Fink & Son, Crawfordsville.
7419	Chas. Rights, Market House, Indianapolis.	8339	J. W. Hoard, Indianapolis.
7421	Geo. C. Woessner, Indianapolis.	8340	J. W. Howard, Indianapolis.
7425	Henry Coleman, Indianapolis.	8348	Mammond & Pasquier, Indianapolis.
7426	Herman Vollrath, Indianapolis.	8349	Hammond & Pasquier, Indianapolis.
7427	Wm. S. Bain, Indianapolis.	8350	Hammond & Pasquier, Indianapolis.
7531	Theo. Thomas, Muncie.	8352	J. M. Schilling, Indianapolis.
7533	G. W. Palmer, Muncie.	8353	Jno. R. Schilling, Indianapolis.
7535	O. M. Palmer, Muncie.	8357	Levy Bros., Marion.
7590	Andrew Maas, Indianapolis.	8360	Geo. Otto, Marion.
7591	Schneider Sisters, Indianapolis.	8362	Chester Macon, Marion.
7602	Levey Bros., Marion.	8394	C. B. O'Donnell, Vincennes.
7624	F. E. Luedcke, Indianapolis.	8406	A. Zwickel, Anderson.
7627	C. Zobbe, Indianapolis.	8490	J. H. Toley & Co., Logansport.
7650	Heckel & Hampel, Jeffersonville.	8494	Robt. McCains, Logansport.
7671	G. A. Dobbins, Hammond.	8532	Frank Fall Bros., Elwood.
7683	H. G. Vlier, Hammond.	8612	Alfred L. Gehrett, Veedersburg.
7800	S. M. Hauseman, Evansville.	9614	J. B. Dunkle & Son, Veedersburg.
7863	G. L. Eisler, Indiana Harbor.	8678	Wayne Delicatessen Co., Ft. Wayne.
7906	Wm. Bofford, Bloomington.	8679	J. Robb, Ft. Wayne.
7908	B. S. Rogers, Bloomington.	8680	Wayne Delicatessen Co., Ft. Wayne.
7985	Alva F. Shirley, Lebanon.	8682	G. R. Walter Co., Ft. Wayne.
8024	D. Kurtz, Alexandria.	8683	G. R. Walter Co., Ft. Wayne.
8025	D. Kurtz, Alexandria.	8684	Wm. C. Meyer, Ft. Wayne.
8085	A. H. Eisterhold, Evansville.	8685	Wm. C. Meyer, Ft. Wayne.
8087	Jacob Folz, Jr., Evansville.	8686	Wm. C. Meyer, Ft. Wayne.
8132	J. M. Kenady, Irvington.	8668	Cut Rate Market, Ft. Wayne.
7962	Armentrout Bros., Frankfort.	8689	Cut Rate Market, Ft. Wayne.
8100	Lon Essig, Indianapolis.	8757	Fred Heiman, Terre Haute.
8144	Bills & Boettcher, Indianapolis.	8875	H. M. Fisher, Franklin.
8152	Irrgang Bros., Indianapolis.	8876	J. D. Boles, Franklin.
8153	Irrgang Bros., Indianapolis.	9143	Munz & Nellens, Peru.
8154	Simmendingers, Indianapolis.	9280	Homer Watson, Marion.

SAUSAGE—LEGAL—Continued.

Lab. No.	Retailer.	Lab. No.	Retailer.
9283	Barney Bros., Marion.	10262	Denkin & Mathis, Van Buren.
9286	M. L. Swayzee, Marion.	10263	J. E. Matchett, Swayzee.
9287	M. L. Swayzee, Marion.	10279	Heffner & Dobeson, Summitville.
9289	Charles Levy Sons Market, Marion.	10280	V. R. Love, Summitville.
9291	C. C. Gordon, Marion.	10281	Marshall & Schaffer, Summitville.
9596	Chris. G. Reined, Shelbyville.	10288	Julius Newman, Evansville.
9597	Fred L. Bogeman, Shelbyville.	10294	John Volz, Evansville.
9609	C. P. Sindlinger, Shelbyville.	10361	Hoffer Bros., Muncie.
9769	Rohrer, South Bend.	10362	Kuhner & Co., Muncie.
9791	E. H. Quillen, South Bend.	10363	I. Benzenbower, Muncie.
9893	Jno. Fisher, Greenfield.	10364	Topp & Moore, Muncie.
9902	Painter & Farling, Bluffton.	10365	Ed. Goebel & Co., Muncie.
9903	Painter & Farling, Bluffton.	10366	George W. Palmer, Muncie.
9987	C. Oscar Tribbey, Plymouth.	10366	Evansville Packing Co., Evansville.
9999	W. R. Crowder, Plymouth.	10387	Gus Weil, Evansville.
10036	H. A. Compton, New Castle.	10415	Court House Grocery, Indianapolis.
10038	J. Meyers, Cambridge City.	10418	O. J. Sloan, Indianapolis.
10067	W. J. Shaffering, Michigan City.	10442	Henry Daniels, Red Key.
10077	O. E. Keading, Michigan City.	10443	Charles Geisler, Red Key.
10080	R. A. Ebert, Michigan City.	10434	Charles Ritter, Hartford City.
10134	C. W. Covey, Princeton.	10435	Frank Wilson, Hartford City.
10141	M. Tibbet, Princeton.	10436	Mike Sauer, Hartford City.
10163	George Hadley, Anderson.	10437	George Rapp, Hartford City.
10164	Striker Bros Anderson.	10438	Jno. Keller, Montpelier.
10167	W. J. Whyte, Anderson.	10439	F. Hedges, Montpelier.
10174	G. W. Hadley, Anderson.	10440	H. Ganister, Albany.
10175	Goff Bros., Anderson.	10447	R. M. Brotherton, Dunkirk.
10178	Jue Phillips, Anderson.	10450	Davis & Spink, Dunkirk.
10179	J. Phillips, Anderson.	10451	Ora Sanders, Middletown.
10180	Masters & Shackelford, Anderson.	10452	B. E. Goff & Son, Middletown.
10246	C. L. Coppock, Jonesboro.		

SAUSAGE—ILLEGAL.

Lab. No.	Retailer.	Borax.	Per cent. Sodium Sulfite.
8316	Jacob Woessner, Indianapolis	Absent...	Present.
8026	John P. Downs, Alexandria	Absent...	.1032
7786	Gus Weil, Evansville	Absent...	.0179
8531	B. H. Keller, Elwood		Present.
8681	Decatur Packing Co., Decatur		.04334
8687	Decatur Packing Co., Decatur		.04334
10240	Wm. Dockter, Gas City		.03628
8451	Carl Statz, Mt. Vernon	Present...	
7507	Ed. Goebel & Co., Muncie		.04032
8358	Chris C. Gordon, Marion	Absent...	.0236
8786	George Sheidel, Terre Haute		Present.
8525	Batchelor & May, Tipton		Present.
8521	Bunch & Bunch, Tipton		Present.
8522	Moore & Surface, Tipton		Present.
7652	Heckel & Hampel, Jeffersonville		.0694

BACON—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
9805	John Wesolowski, South Bend.	10316	C. A. Kilmer, Rochester.
9808	T. Taberski, South Bend.		

BOLOGNA—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8359	M. L. Swazzee, Marion.	7861	Welhey & Banett, Indiana Harbor.
8491	J. H. Toley & Co., Logansport.	7986	Hugh Bowen, Lebanon.
8265	Leslie Good, Mechanicsburg.	9146	S. W. Smith, Peru.
8990	John J. Halberg, Terre Haute.	9807	T. Taberski, South Bend.
7575	Louis Heins, Seymour.	9824	Walt Montgomery, Delphi.
7576	Louis Heins, Seymour.	10000	W. R. Crowder, Plymouth.

BOLOGNA—ILLEGAL.

Lab. No.	Dealer.	Remarks.
8526	Batchelor & May, Tipton.....	Adulterated—Sodium Sulfite.

WIENERWURST—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8208	Thos. C. Scott, Indianapolis.	10327	Charles Odnalt, Vincennes.
8240	Oliver M. Neal, Kirklin.	7654	Anton Stolle, Richmond.
8793	Ehrman & Co., Terre Haute.	7656	Richmond Abattoir, Richmond.
9006	J. W. Hoff, Terre Haute.	7681	F. Kunzmann, Hammond.
9986	C. Oscar Tribbey, Plymouth.	7978	Andrew Overless, Frankfort.
10326	Horace G. Hays, Vincennes.	8025	J. H. O'Bryant, Alexandria.

WIENERWURST—ILLEGAL.

Lab. No.	Dealer.	Remarks.
7652	Charles Hampel, Jeffersonville.....	Adulterated—Sodium Sulfite.

HAMBURGER STEAK—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
7406	Otto Boettcher, Indianapolis.	8393	John B. Zuber, Vincennes.
7415	Chester E. Wright, Indianapolis.	8395	H. G. Haynes, Vincennes.
7420	All. T. Baumb, Indianapolis.	8538	Fred C. Allendorf, Elwood.
7424	Henry Coleman, Indianapolis.	9061	H. Stumpp & Son, Washington.
7593	Fred Jans, Indianapolis.	9061	H. Stumpp & Son, Washington.
7855	Steenbergen, Indiana Harbor.	9771	Rohrer, South Bend.
7905	Wm. Bofford, Bloomington.	10039	J. Meyers, Cambridge City.
7907	Ben. S. Rogers, Bloomington.	10362	Hoffer Bro., Muncie.
7977	Andrew Overless, Frankfort.	10385	Charles Bromm, Evansville.
8083	Aug. Wessel, Evansville.	10391	Yokel & Son, Evansville.
8145	Bills & Boettcher, Indianapolis.	10441	H. Ganister, Albany.
8239	R. C. McIntire, Lebanon.	10449	J. W. Webster, Dunkirk.

HAMBURGER STEAK—ILLEGAL.

Lab. No.	Retailer.	Remarks.
7565	Louis Heins, Seymour.....	Sodium sulfite present.
8175	Fred Alderdorf, Elwood.....	Sodium sulfite present.
8086	Jacob Folz, Jr., Evansville.....	Sodium sulfite present.
8084	Ed. Waldsmith, Evansville.....	Sodium sulfite present.
7600	A. J. Street, Marion.....	Sodium sulfite present.
7509	Ed. Goebel, Muncie.....	Sodium sulfite present.

HAM—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8318	Robert Graham, Indianapolis.	9142	Munz & Nellens, Peru.
8223	Charles R. Steinle, Indianapolis.	9770	Rohrer, South Bend.
8484	John Rabung, Logansport.	9792	E. H. Quillen, South Bend.
8485	A. Hawkins & Son, Logansport.	10166	W. J. Whyte, Anderson.
8493	Elpers & Miller, Logansport.	10177	Zwickel, Anderson.
8736	D. W. Powden, Logansport.	10229	Kepler, Rochester.
7849	John Lesniak, East Chicago.		

MISCELLANEOUS MEATS—LEGAL.

Lab. No.	Article.	Manufacturer or Dealer.
7972	Beef Loaf.....	Libby, McNeil & Co., Chicago.
7394	Chicken Potpie.....	Great Western Canning Co., Delphi.
7966	Potted Tongue.....	Columbia Conserve Co., Indianapolis.
8275	Minced Ham.....	Marlet C. Rohler, Dayton.
7586	Liver Fudding.....	Thos. A. Hendrickson, Indianapolis.
7685	Cornbeef.....	Chas. Berendt, Hammond.
7700	Veal Loaf.....	Max Noach, Hammond.
7858	Bacon.....	J. J. Koch, Indiana Harbor.
8311	Sausage Filler.....	Heller & Co., Chicago.
10068	Cornbeef.....	W. J. Shaffering, Michigan City.
10308	Head Cheese.....	Charles Taylor, Rochester.

MISCELLANEOUS MEATS—ILLEGAL.

Lab. No.	Article.	Manufacturer or Dealer.	Remarks.
8130	Mincemeat.....	Cruikshanks & Co., Allegheny, Pa....	Benzoate of soda present.

LARD AND LARD COMPOUNDS.

The practice, long indulged in by butchers without restraint, of selling a mixture of lard and beef fats as lard, still continues. Of the 179 samples recently analyzed, 89 contained admixtures either of beef fats or cottonseed oil. There are two reasons for this practice; one, the difficulty of producing a pure lard that will not become soft during warm weather, and the other, the fact that the

small butcher can be rendering the scraps from his meat block, sell the extracted fat at a much higher price under the name of "lard" than if it goes to the soap manufacturer. The large manufacturing trade has followed the practice of adding oleo stearine to lard in order to make it firm, and have not until recently declared the fact of its presence. While it may be true that the oleo stearine costs as much as the lard, and in some cases is worth even more, the practice is a deception. At the present time the manufacturing industry is substituting special processes of chilling the lard for the beef oleo, and is producing a superior article that is in accordance with the standards.

LARD—LEGAL.

Lab. No.	Manufacturer or Dealer.	Butyro Reading at 40° C.	Halphen Test.	Beef Fat.
7195	Seymour.	51.0	Negative.	Absent
7588	Kingan & Co., Indianapolis.	50.8	Negative.	
7342	McKee & Rule, Kokomo.	50.25	Negative.	
7346	Walter Ervington, Kokomo.	50.50	Negative.	
7347	McCaffery Bros., Kokomo.	49.40	Negative.	
7380	Indianapolis Abattoir, Indianapolis.	50.30	Negative.	
7381	Indianapolis.	48.50	Negative.	
7394	Chas. Wilson, Elwood.	50.1	Negative.	
7395	Bicknell & Mahon, Elwood.	49.7	Negative.	
7407	Edw. P. Reynolds, Indianapolis.	50.4	Negative.	
7413	John P. Simmendinger's, Indianapolis.	50.3	Negative.	Present.
7585	Coffin & Fletcher Co., Indianapolis.	50.2	Negative.	
7596*	Albert Worm, Indianapolis.	52.5	Cottonseed oil 15%.	
7622	Mrs. F. D. Smith, Indianapolis.	50.4	Negative.	
7623	H. H. Meyer, Indianapolis.	50.3	Negative.	
8049	Hilgemier, Indianapolis.	51.6	Negative.	
8177	Fred Alderdorf, Elwood.	49.5	Negative.	
8199	Koehler Bros., Indianapolis.	49.0	Negative.	
8276	M. C. Rohler, Dayton.	49.4	Negative.	
8317	Jacob Woessner, Indianapolis.	50.8	Negative.	
8396	White & Howard, Muncie.	50.4	Negative.	Absent.
8405	A. Zwickel, Anderson.	49.6	Negative.	
8442	Samuel G. Newman, Evansville.	48.6	Negative.	
8487	Schneider & Co., Logansport.	49.65	Negative.	
8541	Borst Bros., Attica.	49.7	Negative.	
8546	T. A. Brant, Attica.	49.3	Negative.	
8580	J. T. Ives & Sons Co., Delphi.	50.6	Negative.	
8582	Michael Clifford, Delphi.	49.5	Negative.	
8613	Fountain Mds. Co., Veedersburg.	49.6	Negative.	
8615	J. B. Dunkle & Son, Veedersburg.	49.7	Negative.	
8618	Alfonso Irvin, Veedersburg.	49.4	Negative.	Absent.
8620	Le Baw & Phillips, Veedersburg.	48.6	Negative.	
8621	Albert W. Harper, Williamsport.	49.6	Negative.	
8625	Fox Bros., Williamsport.	50.3	Negative.	
8291	Cook & Hensler, Shoals.	50.0	Negative.	
8807	Fred Kramer, Columbus.	50.7	Negative.	
8809	E. Wolfe, Columbus.	50.6	Negative.	
8291	Cook & Hensler, Shoals.	50.0	Negative.	
8807	Fred Kramer, Columbus.	50.7	Negative.	
8809	E. Wolfe, Columbus.	50.6	Negative.	
8814	Jos. Morrison & Son, Columbus.	49.6	Negative.	Absent.
8874	H. M. Fisher, Franklin.	50.0	Negative.	
8877	J. D. Boles, Franklin.	50.0	Negative.	
8976	Edward R. Pierce, Terre Haute.	49.65	Negative.	
9051	George Gilliott, Washington.	49.5	Negative.	
9052	H. F. Vollman, Washington.	49.35	Negative.	
9059	Cabel & Kauffman, Washington.	49.5	Negative.	
9136	Kelly & Altman, Peru.	50.3	Negative.	
9141	Munz & Nellens, Peru.	50.0	Negative.	

*As represented.

LARD—LEGAL—Continued.

Lab. No.	Manufacturer or Dealer.	Butyro Reading at 40° C.	Halphen Test.	Beef Fat.
9144	S. W. Smith, Peru.....	49.2	Negative.....	Absent.
9151	E. A. Schram, Peru.....	50.45	Negative.....	Absent.
9274	Wm. Hillsamer, Marion.....	49.2	Negative.....	Absent.
9276	J. H. Anderson, Marion.....	49.6	Negative.....	Absent.
9277	W. A. Reese, Marion.....	48.65	Negative.....	Absent.
9278	Homer Watson, Marion.....	50.0	Negative.....	Absent.
9281	Creviston Bros., Marion.....	49.85	Negative.....	Absent.
9284	Barney Bros., Marion.....	49.9	Negative.....	Absent.
9285	M. L. Swayzee, Marion.....	49.8	Negative.....	Absent.
9288	Charles Levy, Marion.....	49.5	Negative.....	Absent.
9290	C. C. Gordon, Marion.....	47.6	Negative.....	Absent.
9296	Mack Brown, Linton.....	49.6	Negative.....	Absent.
9299	Herbert Hineman, Switz City.....	49.55	Negative.....	Absent.
9308	Samuel P. Mills, Jasonville.....	49.7	Negative.....	Absent.
9310	Linders Bros., Jasonville.....	49.3	Negative.....	Absent.
9394	Wm. Nance, New Albany.....	50.1	Negative.....	Absent.
9401	Korb Brothers, New Albany.....	49.8	Negative.....	Absent.
9404	J. H. Brown, New Albany.....	49.5	Negative.....	Absent.
9812	Kruzan Bros., Brazil.....	50.2	Negative.....	Absent.
9813	Jones & Co., Brazil.....	49.75	Negative.....	Absent.
9816	A. W. Shaffer, Brazil.....	49.8	Negative.....	Absent.
9982	The Trader Palace Grocery, Plymouth.....	49.6	Negative.....	Absent.
9988	C. Oscar Tribberry, Plymouth.....	49.7	Negative.....	Absent.
9998	W. R. Crowder, Plymouth.....	48.7	Negative.....	Absent.
10064	S. Hunziker, Michigan City.....	50.2	Negative.....	Absent.
10066	W. J. Shafering, Michigan City.....	49.4	Negative.....	Absent.
10074	O. A. Wellnitz, Michigan City.....	50.1	Negative.....	Absent.
10076	O. F. Keading, Michigan City.....	50.3	Negative.....	Absent.
10128	Smith & Riggs, Princeton.....	49.5	Negative.....	Absent.
10135	C. W. Covey, Princeton.....	50.0	Negative.....	Absent.
10137	Louis Salzman, Princeton.....	49.5	Negative.....	Absent.
10140	M. Tibbet, Princeton.....	50.7	Negative.....	Absent.
10259	Vickery Bros., Evansville.....	50.2	Negative.....	Absent.
10293	Jno. Harrigan, Evansville.....	50.3	Negative.....	Absent.
10295	John Folz, Evansville.....	49.6	Negative.....	Absent.
10301	L. F. Downie, Rochester.....	49.6	Negative.....	Absent.
10311	F. Marsh, Rochester.....	49.1	Negative.....	Absent.
10315	C. A. Kilmer, Rochester.....	50.4	Negative.....	Absent.
10323	R. S. Lowery, Rochester.....	49.8	Negative.....	Absent.
10390	George Egan, Evansville.....	50.1	Negative.....	Absent.
10392	Charles Arnold, Evansville.....	50.15	Negative.....	Absent.

LARD—ILLEGAL.

Lab. No.	Dealer.	Butyro Reading at 40° C.	Halphen Test for Cotton Seed Oil.	Beef Fat.
7769	Louis Cornet, Indianapolis.....	50.7	30%.....	Present.
7350	W. J. Webb, Kokomo.....	50.8	15%.....	
7377	New York Store, Indianapolis.....	50.1	10%.....	
7625	—, Indianapolis.....	50.2	Negative.....	Present.
7795	Vickery Bros., Evansville.....	55.0	40%.....	Present.
8050	—, Indianapolis.....			Present.
7595	F. P. Jagers, Indianapolis.....	49.0	Negative.....	Present.
7589	Andrew Maas, Indianapolis.....	50.0	Negative.....	Present.
7422	Chas. H. Cook, Indianapolis.....	52.9	30%.....	
7423	Jno. Brenner, Indianapolis.....	53.2	30%.....	
7592	Schneider Sisters, Indianapolis.....	50.4	15%.....	Present.
7669	Standard Grocery Co., Indianapolis.....	50.4	10%.....	Present.
7594	Fred Jaus, Indianapolis.....	50.5	Negative.....	Present.
7626	C. Zobbe, Indianapolis.....	49.3	Negative.....	Present.
7587	Chas. Morback, Indianapolis*.....	49.8	Negative.....	Present.
7508	Ed. Goebel, Muncie.....	49.6	Negative.....	Present.
7532	G. W. Palmer, Muncie.....	49.0	3%.....	Present.
7503	H. C. Adams, Muncie.....	49.5	3%.....	Present.
7534	O. M. Stewart, Muncie.....	51.8	15%.....	Present.

*Guaranteed to Morback to be pure by Wm. Roth Co., Cincinnati, Manufacturers.

LARD—ILLEGAL—Continued.

Lab. No.	Dealer.	Butyro Reading at 40° C.	Halphen Test for Cotton Seed Oil.	Beef Fat.
7530	Kuhner & Co., Muncie.....	51.8	15%.....	Present.
8022	Daniel Kurtz, Alexandria.....	51.3	Negative....	Present.
7389	Weichner & Arend, Elwood.....	51.2	15%.....	
7801	Louis Schnadel, Evansville.....	50.8	Negative....	Present.
7762	Samuel G. Newman, Evansville.....	45.5	Negative....	Present.
7796	Vickery Bros., Evansville.....	51.3	Negative....	Present.
7603	Levey Bros., Marion.....	50.1	Negative....	Present.
7601	A. J. Street, Marion.....	52.4	25%.....	Present.
7850	John Lesniak, East Chicago.....	56.1	40%.....	Present.
7853	W. R. Diamond, East Chicago.....	51.1	Negative....	Present.
7854	Steenbergen, Indiana Harbor.....	50.0	Negative....	Present.
7857	J. J. Koch, Indiana Harbor.....	51.3	Negative....	Present.
7860	Welhey & Banett., Indiana Harbor.....	50.9	Negative....	Present.
7862	G. L. Eisler, Indiana Harbor.....	51.7	Negative....	Present.
7674	W. G. Beiriger, Hammond.....	50.1	Negative....	Present.
7699	Max Noach, Hammond.....	50.4	Negative....	Present.
7670	G. A. Dobbins, Hammond.....	49.5	Negative....	Present.
7677	J. J. Austgen, Hammond.....	50.0	Negative....	Present.
7679	F. Kunzmann, Hammond.....	49.7	15%.....	Present.
7682	H. G. Vlier, Hammond.....	52.4	25%.....	Present.
7684	Chas. Berendt, Hammond.....	53.0	30%.....	Present.
8549	Geo. Fenerstein, Attica.....	49.5	Negative....	Present.
8606	Ost & Davis, Covington.....	50.0	Negative....	Present.
8605	Wm. Dennis, Covington.....	49.75	Negative....	Present.
8743	F. W. Klein, Logansport.....	50.4	5%.....	Present.
8492	Elpers & Miller, Logansport.....	48.75	Negative....	Present.
8737	D. W. Powden, Logansport.....	48.4	Negative....	Present.
8495	Robt. McCains, Logansport.....	49.4	10%.....	Present.
8483	John Rabung, Logansport.....	49.6	5%.....	Present.
8481	Louis Diechman, Logansport.....	49.7	Negative....	Present.
8480	J. H. Foley & Co., Logansport.....	49.35	Negative....	Present.
8768	Chas. A. Raeber, Terre Haute.....	49.65	10%.....	Present.
8773	Ed. A. Hollingsworth, Terre Haute.....	51.3	10%.....	Present.
8758	Fred Heiman, Terre Haute.....	47.9	Negative....	Present.
8759	Chas. H. Ehrman & Co., Terre Haute.....	50.9	25%.....	Present.
8617	W. S. Bannon, Veedsburg.....	49.8	Negative....	Present.
8134	J. C. Roth, Cincinnati.....	50.0	Negative....	Present.
8214	E. E. Waddington, Indianapolis.....	48.8	Negative....	Present.
8222	Chas. R. Steidle, Indianapolis.....	48.7	Negative....	Present.
8400	H. D. Bickel, Marion.....	49.6	Negative....	Present.
8774	George Wood, Terre Haute.....	51.4	10%.....	Present.
8791	C. O. Boyll, Terre Haute.....	49.5	Negative....	Present.
8794	John F. Caine, Terre Haute.....	50.2	Negative....	Present.
8797	C. W. Nagle, Terre Haute.....	49.6	Negative....	Present.
8289	Jos. C. Herron, Crawfordsville.....	49.4	5%.....	Present.
8543	Daniel V. Smith & Co., Attica.....	49.7	Negative....	Present.
8544	Fred Springman, Attica.....	50.1	Negative....	Present.
8547	H. W. Newlin, Attica.....	49.6	Negative....	Present.
8548	Lanman & Hock, Attica.....	49.7	Negative....	Present.
8601	Zimmerman & Son, Covington.....	50.0	Negative....	Present.
8604	Lewis Nebeker, Covington.....	50.0	Negative....	Present.
8607	Coleman, Reeves & Coleman, Covington.....	50.5	Negative....	Present.
8610	Merryman Bros., Covington.....	49.9	Negative....	Present.
8611	George W. Crane, Covington.....	54.9	30%.....	Present.
8623	A. W. Harper, Williamsport.....	48.7	Negative....	Present.
8626	H. W. Darling, Williamsport.....	48.3	Negative....	Present.
8755	Dreyfus & Co., Lafayette.....	49.9	Negative....	Present.
8756	Eckhouse, Lafayette.....	49.8	Negative....	Present.
8243	W. A. Huffine & Son, Kirklint.....	50.0	Negative....	Present.
8139	Smith Brothers, Zionsville.....	50.2	Negative....	Present.
9398	Benj. Jackson, New Albany.....	50.3	Negative....	Present.
9396	John Stull, New Albany.....	49.65	Negative....	Present.
9393	Miss Katie Dean, New Albany.....	50.0	Negative....	Present.
9658	W. C. Blum, Connorsville.....	.....	15%.....	Present.
8282	Sinkey & Gilkey, Crawfordsville.....	48.7	Negative....	Present.
8333	Phillip Fink & Son, Crawfordsville.....	48.7	Negative....	Present.
8288	T. E. Weil & Co., Crawfordsville.....	48.8	Negative....	Present.
8607	Coleman, Reeves & Coleman, Covington.....	50.5	Negative....	Present.
8548	Lauman & Hock, Attica.....	49.7	Negative....	Present.
8547	H. W. Newlin, Attica.....	49.6	Negative....	Present.

LEAVENING PRODUCTS.

Nine samples of baking powder and 41 of cream of tartar were examined. Of these numbers eight of the baking powders were up to standard, and 38 of the cream of tartars were good.

BAKING POWDER—LEGAL.

Lab. No.	Manufacturer or Dealer.	Available Carbon Dioxid, Per Cent.
7353	W. J. Webb, Kokomo.....	12.04
7521	Omer Stockman, Lawrenceburg.....	12.78
8730	Calumet Baking Powder Co., Chicago.....	11.59
7864	G. L. Eisler, Indiana Harbor.....	10.04
7911	Miss Elsie Marshall, Richmond.....	11.09
9352	J. H. Walker, Rockport.....	10.9
9928	E. C. Harley & Co., Dayton, O.....	*52.1
9930	E. C. Harley & Co., Dayton, O.....	10.5

*Baking soda.

BAKING POWDER—ILLEGAL.

Lab. No.	Manufacturer or Dealer.	Available Carbon Dioxid, Per Cent.	Remarks.
8838	Froman Bros., Columbus.....	9.06	An old powder.

CREAM TARTAR—LEGAL.

Lab. No.	Dealer.	Per Cent. Purity.
7386	J. J. Keene, Indianapolis.....	100.0
7388	Fisher's Pharmacy, Indianapolis.....	100.0
7390	Chas. Hock, Indianapolis.....	99.0
7592	Wm. H. Baird, Indianapolis.....	99.5
7528	J. R. Erganbricht, Indianapolis.....	99.9
7607	C. H. Overman, Marion.....	99.0
7617	Hildebrand & Ansley, Marion.....	99.0
7633	J. W. Hoover, Jeffersonville.....	100.0
7645	Ben Doolittle, Jeffersonville.....	100.0
7720	Fred M. Petersheim, Evansville.....	98.0
7732	Gottman Drug Co., Evansville.....	96.0
7744	J. F. Bomm Drug Co., Evansville.....	99.0
7753	L. C. Bomm Drug Co., Evansville.....	97.0
7997	Siess Bros., Arcadia.....	97.4
8001	Siess Bros., Arcadia.....	97.6
7873	H. H. Jeffers, Bloomington.....	99.0
7877	Jno. W. O'Harrow, Bloomington.....	99.0
7884	J. C. Vermillion, Bloomington.....	98.0
7886	Wood Wiles, Bloomington.....	98.0
7891	Thomas J. Penrod, Bloomington.....	99.0
7937	Brown Drug Co., Lafayette.....	98.0
7956	E. B. Merritt, Frankfort.....	99.0
8238	Meyer Bros., St. Louis.....	98.0
8046	Muesh & Co., New York City.....	99.0
8057	G. W. Tepe, Evansville.....	98.0
8089	Leight & Co., Evansville.....	99.0
8091	Leight & Co., Evansville.....	99.0
8586	Ralph Hill, Delphi.....	97.0
8587	Crawford Bros., Delphi.....	97.0
8593	George Gifford, Delphi.....	97.0
8857	Will Wetz, Columbus.....	97.0
9088	I. J. Rich, Washington.....	97.0
.....	L. M. Davis, Marengo.....	96.7
9799	Brodbeck Bros., South Pend.....	96.0
9911	A. C. Pilkenton, Greenfield.....	97.0
9911	N. Reeves, Knightstown.....	97.0
9989	Frank Vongelder, Plymouth.....	97.0
10057	E. R. Durkee & Co., New York.....	97.0

CREAM TARTAR—ILLEGAL.

Lab. No.	Dealer.	Per Cent. Purity.	Remarks.
8280	Barnhill, Hornaday & Pickett, Crawfordsville	99.0	Starch and alum present
8840	Cox & McMillan, Columbus	99.5	Starch and alum present.
8269	Lawrence Nicely, Dayton	81.0	Starch and alum present.

PRESERVED FRUITS, JELLIES AND JAMS.

But few samples of these products have been examined. For the most part such goods are now properly labeled. Of the 13 samples analyzed 11 were pure and 2 were bad.

PRESERVED FRUITS, JELLIES AND JAMS—LEGAL.

Lab. No.	Article.	Brand.	Manufacturer or Dealer.	Remarks
7486	Blackberry Glucose Preserves.	Crescent....	....., Indianapolis	Passed.
7485	Cherry Glucose Preserves.	Crescent....	....., Indianapolis	Passed.
7483	Peach Glucose Preserves	Crescent....	....., Indianapolis	Passed.
7784	Plum Glucose Preserves	Crescent....	....., Indianapolis	Passed.
7487	Raspberry Glucose Preserves..	Crescent....	....., Indianapolis	Passed.
7482	Strawberry Glucose Preserves.	Crescent....	....., Indianapolis	Passed.
7091	Sliced Pineapple Preserves ...	Ko-We Ba.	Kothe, Wells & Bauer, Indianapolis	Pure.
7186	Currant Preserves .....	.....	Pierson Bros., Danville	Pure.
7291	Apple Jelly .....	.....	Rush Co. Grocery Co., Rushville	Pure.

PRESERVED FRUITS, JELLIES AND JAMS—ILLEGAL.

Lab. No.	Article.	Brand.	Manufacturer or Dealer.	Remarks.
7798	Glucose Plum Preserves..	Buffalo.	Hulman Preserve Co., Evansville	Adulterated with Benzoate of Soda.
7936	Strawberry Jam .....	.....	P. J. Ritter Conserve Co., Lafayette	Adulterated with Benzoate of Soda.

OLIVE OIL.

Fifty-three samples of olive oil were analyzed during the year and but one was found to be adulterated. This indicates an adulteration of less than 2 per cent. as compared with an adulteration of 30 per cent. for 1906. It is evident that it is no longer impossible to buy pure olive oil.

OLIVE OIL—LEGAL.

Lab. No.	Manufacturer or Retailer.	Halphen Test.	Butyro Reading at 20° C.	Specific Gravity.
7164	Harry Mills, Martinsville	Negative...	64.50	.....
7194	....., Dana	None	65.00	.....
7203	Jno. E. Broom, Indianapolis .....	.....	65.25	.....
7204	H. J. Huder, Store No. 1., Indianapolis .....	.....	65.45	.....
7211	Jno. Carroll, Indianapolis .....	.....	65.25	.....

OLIVE OIL—LEGAL—Continued.

Lab. No.	Manufacturer or Retailer.	Halphen Test.	Butyro Reading at 20° C.	Specific Gravit.
7230	Julius Hoag, Indianapolis.....		65.15	.9107
7243	Francis Pharmacy, Indianapolis.....	None.....	62.90	.9114
7244	W. H. Burget, Indianapolis.....	None.....	64.95	.9120
7253	H. O. Atchinson, Indianapolis.....	None.....	64.45	.9124
7304	Jno. C. Luken, Richmond.....	None.....	64.20	.9112
7305	J. S. Adams, Richmond.....	None.....	65.60	.9130
7308	W. H. Dickinson, Richmond.....	None.....	64.40	.9126
7309	T. F. McDonnell, Richmond.....	None.....	64.80	.9126
7355	H. E. Franer & Co., Indianapolis.....	None.....	65.00	.9129
7358	Ferd A. Mueller, Indianapolis.....	None.....	65.00	.9122
7539	_____, Indianapolis.....	None.....	64.50	.9116
7610	C. H. Overman, Marion.....	None.....	64.10	.9134
7618	Hildebrand & Ansley, Marion.....	None.....	65.40	.9139
7712	_____, Indianapolis.....	None.....	64.20	.9090
8121	_____, Indianapolis.....	None.....	64.53	
8126	_____, Indianapolis.....	None.....	64.70	
8273	Fred R. Widmer, Dayton.....	Negative.....	65.0	.909
8410	J. Turicchi & Co., Muncie.....	Negative.....	64.3	.914
8433	C. W. Aobersmeyer, Ft. Wayne.....	Negative.....	63.7	.912
8434	H. J. Bauer, Ft. Wayne.....	Negative.....	64.6	.911
8438	Jordan & Sherrard, Ft. Wayne.....	Negative.....	64.3	.913
8501	Red Cross Pharmacy, Logansport.....	Negative.....	62.9	.908
8506	Homer Closson, Logansport.....	Negative.....	64.4	.909
8573	May Ritter, Thorntown.....	Negative.....	64.2	
8738	Hugh Smith, Logansport.....	Negative.....	64.3	.908
8766	David P. Cox, Terre Haute.....	Negative.....	64.85	.908
8769	City Hall Pharmacy, Terre Haute.....	Negative.....	64.25	.909
8770	New Central Pharmacy, Terre Haute.....	Negative.....	64.35	.908
8771	Buntin Drug Co., Terre Haute.....	Negative.....	64.05	.909
8772	George W. J. Hoffman, Terre Haute.....	Negative.....	64.35	.909
8775	George Reiss, Terre Haute.....	Negative.....	64.25	.908
8789	Conrad J. Herbert, Terre Haute.....	Negative.....	67.85	.913
8795	N. Rittson, Terre Haute.....	Negative.....	65.05	.910
8981	Carl Krietenstein, Terre Haute.....	Negative.....	63.75	.912
9307	J. J. Lacey & Son, Jasonville.....	Negative.....	64.5	.913
9634	Green Bros., Connersville.....	Negative.....	64.9	.913
9689	E. W. Swadley, Wabash.....	Negative.....	64.4	.912
9698	E. Gackenhimer, Wabash.....	Negative.....	64.6	.913
9708	K. Bockman, Wabash.....	Negative.....	64.6	.912
9714	Bradley Bros., Wabash.....	Negative.....	65.0	.912
9732	E. E. Muhler, Sullivan.....	Negative.....	64.7	.913
9735	Ruddell Bros., Sullivan.....	Negative.....	64.6	.914
9836	Red Cross Drug Co., Tipton.....	Negative.....	64.9	.913
9860	Chickasaw Pharmacy, Peru.....	Negative.....	64.8	.913
9868	A. C. Pilkenton, Greenfield.....	Negative.....	65.1	.912
9872	M. C. Quigley, Greenfield.....	Negative.....	65.0	.913
9878	W. S. Pugh, Greenfield.....	Negative.....	65.1	.912

OLIVE OIL—ILLEGAL.

7799	Fred Schroeder, Evansville.....	Present....	66.9	.914
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MAPLE PRODUCTS.

While in years past no article of food has been so generally mislabeled as have the maple products, at the present time all of the goods on the market conform to the legal standard. Of the 47 samples analyzed 25 were good and 22 adulterated. The number of adulterated samples is high because of the fact that a carload of sugar billed to Indianapolis was wrecked in transit and sold by the railroad company to a dealer in the habit of handling grocery supplies. He distributed the sugar at a low price among many of the Indianapolis grocers under the supposition that it was a pure maple product, when, as a matter of fact, it was largely cane sugar.

MAPLE SYRUP—LEGAL.

Lab. No.	Brand.	Manufacturer or Dealer.	Ash.	Alkalinity of Ash.	Direct Polarization.	Invert Polarization.	Sucrose.
6981	Maple Syrup.	Mr. Lee Bedford, Indianapolis.	.570	1.00	+64.2	-20.2	63.9
7024		E. M. Blessing, Danville.	.740	1.08	+60.4	-22.2	62.6
7025		C. M. Gentry, Noblesville.	.868	1.33	+58.2	-20.2	59.4
7032		McClintoc, Noblesville.	.950	1.36	+53.2	-21.0	56.2
7115		Grant Isanogle, Muncie.	1.124	1.32	+64.8	-19.8	64.0
7190		A. A. Zion, Indianapolis.	.894	1.08	+58.8	-22.2	60.9
7212	Gil. Edge.	J. F. Corcoran, Indianapolis.	.60	.80	+6.30	-22.0	63.4
7382		N. M. Moore Gro. Co., Indianapolis.	.774	1.32	+62.8	-33.0	72.6
7466	Premier.	J. H. Groeshider, New Albany.	.578	.96	+53.2	-16.8	52.2
7628		Moore Grocery Co., Indianapolis.	.900	1.36	+56.2	-28.2	86.6
7689		Chas. Tyndall, Greenfield.	.72	1.48	+26.0	-15.4	33.4
9167	Monarch.	Reid Murdock Co., Chicago.	.672	.92	+60.2	-19.8	60.0
10192		P. N. Hornaday, N. Manchester.	.87	1.36	+40.8	-19.6	37.7

MAPLE SYRUP—ILLEGAL.

7360	Michigan Maple Syrup.	F. N. Linder, Indianapolis.	.426	.56	+81.6	+41.8	31.5
7393	Maple Leaf.	New York Store, Indianapolis.	.312	.48	+126.0	+112.4	10.3
9238		Williams Bros., Detroit.	.15	.22	+45.0	-21.6	38.92
9197	Maple Drops.	Taylor & Crose, Thornstown.			+139.4	+125.6	10.4

MAPLE SUGAR—LEGAL.

Lab. No.	Brand.	Manufacturer or Dealer.	Ash.	Alkalinity of Ash.	Direct Polarization.	Invert Polarization.	Sucrose.
6975		Chas. Railsback, Indianapolis.	1.360	1.92	+59.6	-23.2	62.7
6976		E. A. Shultz, Indianapolis.	2.040	2.20	+63.4	-28.6	69.7
6978		H. E. Hernan, Indianapolis.	.750	.76	+87.0	-17.8	79.3
7007		Chas. Railsback, Indianapolis.	1.240	1.80	+83.2	-28.6	84.7
7109		Moore Grocery Co., Indianapolis.	1.426	1.88	+87.6	-18.5	80.3
7160		J. McIlvain, Martinsville.	1.460	1.04	+76.0	-26.6	77.1
7165		J. W. Lewis, Martinsville.	1.400	1.36	+86.0	-30.0	87.2
7217		S. J. Halbert, Orleans.	4.018	5.20	+76.0	-27.6	78.4
7235		R. M. Mueller, Indianapolis.	1.320	2.00	+83.4	-25.6	82.5
7314			1.100	1.64	+80.4	-27.6	81.8
8588		Yantis Wills, Delphi.	.60	.60	+79.6	-24.0	76.22

MAPLE SUGAR—ILLEGAL.

6979		Frank Gross, Indianapolis*.	.600	.68	+77.6	-27.1	79.3
6980	A. Candy.	Navin's Drug Store, Indianapolis.	1.195	.79			
6993	A. M. Co.	Gus Hauck, Indianapolis*.	.530	.68	+85.6	-13.6	75.1
6994		Standard Grocery Co., Indianapolis.	.200	.96	+89.4	-32.1	82.0
6995		Charles H. Rinne, Indianapolis*.	.900	.68	+77.2	-24.6	77.1
6996		Frank M. White, Indianapolis*.	.600	.64	+83.8	-28.6	85.1
7018		Gus Hauck, Indianapolis.	.452	.60	+86.6	-12.6	75.1
7019		H. F. Niernan, Indianapolis.	.430	.64	+89.0	-13.4	77.6
7033	Block Sugar.	Deck Bros., Noblesville.	.694	.76	+81.0	-12.24	70.7
7094	Manhattan Block Sugar.	Frank Gross, Indianapolis*.	.612	.76	+86.4	-33.0	90.4
7171		Robt. F. Woods, Martinsville.	.830	.48	+110.0	-21.8	90.2
7254		Daniel L. Buser, Indianapolis*.	.110	.12	+101.0	-11.8	84.1
7454		Gus A. Schimpff, Jeffersonville.	.718	.76	+93.0	-24.8	89.2
7543		—, Indianapolis.	.544	.72	+96.4	-0.0	73.0
7545		—, Indianapolis.	.440	.56	+83.6	-28.8	85.1
9733	Sap.	H. E. Dutton, Sullivan.	.22	.36	+69.2	-20.8	46.75
7008		Glick & Shane, Indianapolis.	.144	.24	+101.2	-10.0	84.2
7254		Daniel L. Buser, Indianapolis.	.11	.12	+101.0	-11.8	84.18
7550		Hays & Co., Frankfort.	.792	.68	+85.8	-25.8	84.5

*This sugar was part of a carload damaged in shipment and sold by the Railroad Company as pure maple sugar.

SPICES.

In no article of food has the improvement in quality been more marked than in the case of spices. This is due in part to the fact that the trade is now handling spices in small paper cartons in place of the former custom of using bulk spices. Of the 265 samples examined but 12, or 4.5 per cent., were adulterated. Of 18 mustards analyzed all were pure; of 28 cloves, 27 were pure; of 18 gingers, all were pure; of 2 nutmegs, all were pure; of 60 cinnamons, 59 were pure; of 8 cayenne peppers, 7 were pure; of 82 peppers, 78 were pure, and of 48 allspice, 43 were pure. Several of the samples of allspice reported as adulterated were duplicate samples purchased for court purposes. It may be accepted as a fact that at the present time no impure spices are being placed on the Indiana market. The sale of compound spices has been prohibited. Compound spices made by mixing inert material, such as ground olive stones, cereals, ground cocoanut shells, etc., with genuine spices, are of little value to the consumer and cost him more than the pure product, because of the fact that the inert filler has to be paid for as well as the full price for the spice actually present.

MUSTARD—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer
7650	Woolson Spice Co., Toledo, Ohio.	8855	Will Wetz, Columbus.
7738	Meyer Bros., St. Louis.	8866	W. L. Patrick, Columbus.
7756	Thompson-Taylor Co., Chicago.	8892	H. N. Dunlap, Franklin.
7788	Grand Union Tea Co., New York.	9039	R. A. Dunn, Stinesville.
7804	E. R. Durkee & Co.	9041	Louis Keller, Washington.
7868	Dwinell-Wright Co., Boston.	9045	W. E. Jeffrey, Washington.
7991		9084	I. J. Rich, Washington.
7999		9213	Charles Coonley Co., South Bend.
8297	Thompson & Taylor, Chicago.	9348	Thomas W. Irwin, Cannelton.

CLOVES—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7154	Albert Schillinger, Indianapolis.	7998	Siess Bros., Arcadia.
7157	Job. D. Oranhood, Indianapolis.	8002	Siess Bros., Arcadia.
7206	Daniel T. Buser, Indianapolis.	8055	Thompson-Taylor Co., Chicago.
7311	Brown & Cooper, Richmond.	8296	Thompson & Taylor Co., Chicago.
7649	Woolson Spice Co., Toledo, Ohio.	8306	S. & S. Coffee Co., St. Louis.
7726	D. G. Evans & Co., St. Louis.	8842	Newsom & Son, Columbus.
7731	C. F. Blanke & Co., St. Louis.	8844	James H. Clark, Columbus.
7740	Meyer Bros., St. Louis.	8851	Will Wetz, Columbus.
7758	Thompson-Taylor Co., Chicago.	8864	W. L. Patrick, Columbus.
7792	Grand Union Tea Co., New York.	8891	H. N. Dunlap, Franklin.
7805	E. R. Durkee & Co.	9086	I. J. Rich, Washington.
7871	Dwinell-Wright Co., Boston.	9131	W. J. Hanger, Salem.
7876	Reid, Murdoch & Co., Chicago.	9229	L. M. Davis, Marengo.
7993	Siess Bros., Arcadia.		

GINGER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7324	W. N. McGraw, Tipton.	8304	S. & S. Coffee Co., St. Louis.
7567	W. F. Meyer, Seymour.	8847	Jas. H. Clark, Columbus.
7647	Best Bros., Jeffersonville.	8854	Will Wetz, Columbus.
7749	J. F. Bruning & Son, Evansville.	8861	W. L. Patrick, Columbus.
7808	Parson & Scoville, Evansville.	9037	R. A. Dunn, Stinesville.
7869	Urney & Kinser, Bloomington.	9042	Mrs. W. E. Jeffrey, Washington.
7994	———, Arcadia.	9083	I. J. Rich, Washington.
8004	———, Arcadia.	9127	Guy Neal, Salem.
8053	Thompson-Taylor Co., Chicago.	9227	L. M. Davis, Marengo.
8295	Thompson & Taylor Co., Chicago.	9349	Thomas W. Irwin, Cannelton.

CINNAMON—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7155	Albert Schelling, Indianapolis.	7859	J. J. Koch, Indiana Harbor.
7156	Job D. Orabood, Indianapolis.	7872	Dwinell-Wright Co., Boston.
7158	Hareden W. Carter, Indianapolis.	7875	Jos. Strong & Co., Boston.
7162	Harry Mills, Indianapolis.	7992	Siess Bros., Arcadia.
7207	Austin, Nichols & Co., New York.	8028	Ulman, Dreyfus Co., Cincinnati.
7210	Canby, Asch & Canby, Dayton, Ohio.	8054	Thompson-Taylor Co., Chicago.
7237	R. M. Mueller, Indianapolis.	8129	O. L. Means, Shelbyville.
7251	H. O. Atchinson, Indianapolis.	8299	Thompson & Taylor Co., Chicago.
7263	S. C. Goff, Shelbyville.	8305	S. & S. Coffee Co., St. Louis.
7268	O. L. Means, Shelbyville.	8331	E. W. Harris, Crawfordsville.
7272	A. L. Aldrich, Rushville.	8667	Thompson-Taylor Co., Chicago.
7277	Court House Grocery, Rushville.	8764	W. W. Kaufman, Terre Haute.
7282	J. A. Craig, Rushville.	8848	George I. Winans, Columbus.
7312	Brown & Cooper, Richmond.	8856	Will Wetz, Columbus.
7348	McCaffery Bros., Kokomo.	8862	W. L. Patrick, Columbus.
7385	Ed. Schaaf, Greentown.	8894	H. N. Dunlap, Franklin.
7392	W. H. Caven, Elwood.	9038	R. A. Dunn, Stinesville.
7327	Geo. Shortle, Jr., Tipton.	9044	W. E. Jeffrey, Washington.
7444	R. L. Leeson & Son Co., Elwood.	9082	I. J. Rich, Washington.
7499	M. A. Allyn, Muncie.	9126	Guy Neal, Salem.
7330	The Beeler Co., Tipton.	9129	W. J. Hanger, Salem.
7339	McKee & Rule, Kokomo.	9292	Robertson Bros., Linton.
7505	C. A. Cropper, Muncie.	9293	Enoch Murphy, Linton.
7648	Woolson Spice Co., Toledo.	9295	Mack Brown, Linton.
7673	W. G. Beiriger, Hammond.	9350	Thomas W. Irwin, Cannelton.
7729	C. F. Blanke & Co., St. Louis.	9800	Brodbeck Bros., South Bend.
7751	J. F. Bruning & Son, Evansville.	9985	Ullman's, Cincinnati.
7757	Thompson-Taylor Co., Chicago.	10310	F. Marsh, Rochester.
7791	Grand Union Tea Co., New York.	10319	C. A. Kilmer, Rochester.
7810	E. R. Durkee & Co.		

CINNAMON—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
8846	James H. Clark, Columbus.....	Adulterated with ground olive stones.

CAYENNE PEPPER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7322	J. C. Lindsay, Tipton.	7809	E. R. Durkee & Co.
7727	D. G. Evans & Co., St. Louis.	8845	James H. Clark, Columbus.
7741	Meyer Bros., St. Louis.	9081	I. J. Rich, Washington.
7793	Grand Union Tea Co., New York.		

WHITE PEPPER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
7743	E. R. Dune, New York City	

PEPPER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7153	Ernest Knop, Indianapolis.	7874	Jos. Strong & Co., Terre Haute.
7161	Harry Mills, Martinsville.	8056	Thompson-Taylor Co., Chicago.
7167	O. E. Toner, Martinsville.	8235	W. M. Griffin Co., Ft. Wayne.
7173	Payne & Clarkson, Martinsville.	8298	Thompson & Taylor, Chicago.
7208	Austin, Nichols & Co., New York.	8302	S. & S. Coffee Co. St. Louis.
7236	R. M. Mueller, Indianapolis.	8307	Thompson & Taylor Co.
7238	C. W. Verberg, Indianapolis.	8386	Sims & Ohl, Mulberry.
7241	Francis Pharmacy, Indianapolis	8666	Thompson-Taylor Co., Chicago.
7261	S. C. Goß, Shelbyville.	8839	Frohman Bros., Columbus.
7266	O. L. Means, Shelbyville.	8841	Newsom & Son, Columbus.
7270	A. L. Aldrich, Rushville.	8853	Will Wetz, Columbus.
7275	Court House Grocery Co., Rushville.	8863	W. E. Patrick.
7280	J. A. Craig, Rushville.	9012	All. Williams, Bloomfield.
7323	W. N. McGraw, Tipton.	9036	R. A. Dunn, Stinesville.
7326	Geo. Shortle, Jr., Tipton.	9040	H. F. Vollman Grocery Co., Washington.
7329	The Beeler Company, Tipton.	9085	I. J. Rich, Washington.
7338	McKee & Rule, Kokomo.	9125	Guy Neal, Salem.
7343	Williams Bros., Kokomo.	9130	W. J. Hawger, Salem.
7351	W. J. Webb, Kokomo.	9135	Kelly & Allman, Peru.
7443	R. L. Leeson & Sons Co., Elwood.	9138	McCaffery & Co., Peru.
7448	A. J. Redding, Anderson.	9148	S. W. Smith, Peru.
7500	M. A. Allyn, Muncie.	9226	L. M. Davis, Marengo.
7504	C. A. Cropper, Muncie.	9239	Eddy & Eddy, St. Louis.
7520	H. R. Dosse & Co., Cincinnati.	9303	Oliver Specker, Jasonville.
7528	J. B. Piner, Muncie.	9347	Thomas W. Irwin, Cannelton.
7646	Woolson Spice Co., Toledo, Ohio.	9793	Charles Wagener, South Bend.
7675	John A. Tolman, Chicago.	9795	G. C. Muessel & Son, South Bend.
7713	Firchuff Bros., Whiting.	9798	Brodbeck Bros., South Bend.
7728	D. G. Evans & Co., St. Louis.	9802	Salinger Bros., South Bend.
7742	E. R. Dune & Co., New York City.	9933	E. C. Harley Co., Dayton, Ohio.
7748	J. F. Bruning & Son.	9984	Ullman's, Cincinnati, Ohio.
7760	Newton Tea & Spice Co., Cincinnati.	9991	Ullman's, Cincinnati, Ohio.
7789	Grand Union Tea Co., New York.	10302	L. E. Downie, Rochester.
7802	Reid, Henderson & Co., Chicago.	10309	F. Marsh, Rochester.
7807	E. R. Durkee & Co.	10318	C. A. Kilmer, Rochester.
7856	Steenbergen, Indiana Harbor.	10320	R. S. Lowery's, Rochester.
7870	Dwinell-Wright Co., Boston.		

PEPPER—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
7248	W. H. Burget, Indianapolis	Adulterated with ground olive stones.
7166	O. C. Toner, Martinsville	Adulterated with ground olive stones.
7384	Ed. Schaaf, Greentown	Adulterated with cayenne pepper.
8849	George I. Winans, Columbus	Adulterated with ground olive shells.

ALLSPICE—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7149	Jno. F. Haurman, Indianapolis.	7759	Thompson-Taylor Co., Chicago.
7159	Harlen W. Carter, Indianapolis.	7790	Grand Union Tea Co., New York.
7163	Harry Mills, Martinsville.	7806	E. R. Durkee & Co.
7174	Payne & Clarkson, Martinsville.	7996	
7205	Daniel S. Buser, Indianapolis.	8005	
7209	Canby, Asch & Canby, Dayton.	8294	E. Bierhaus & Sons, Vincennes.
7262	S. C. Goff, Shelbyville.	8303	Bierhaus Bros., Vincennes.
7271	A. L. Aldrich, Rushville.	8843	James H. Clark, Columbus.
7276	Court House Grocery, Rushville.	8852	Will Wetz, Columbus.
7325	W. N. McGraw, Tipton.	8865	W. L. Patrick, Columbus.
7328	Geo. Shortle, Jr., Tipton.	8892	H. N. Dunlap, Franklin.
7331	The Beeler Co., Tipton.	9042	W. E. Jeffrey, Washington.
7340	McKee & Rule, Kokomo.	9128	Guy Neal, Salem.
7349	McCaffery Bros., Kokomo.	9136	Kelly & Allman, Peru.
7445	R. L. Leeson & Son Co., Elwood.	9147	S. W. Smith, Peru.
7447	A. J. Redding, Anderson.	9661	M. Wernger & Son, Connersville.
7501	M. A. Allyn & Co., Muncie.	9929	E. C. Harley Co., Dayton, O.
7506	C. A. Cropper, Muncie.	10063	Sam Hunziker, Michigan City.
7529	J. B. Piner, Muncie.	10069	Finske's Grocery, Michigan City.
7676	John A. Toloman, Chicago, Ill.	10070	Finske's Grocery, Michigan City.
7739	Meyer Bros., St. Louis, Mo.	.....	O. A. Wellnitz, Michigan City.
7750	J. F. Bruning & Son, Evansville.	10321	R. S. Lowrey, Rochester.

ALLSPICE—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
7267	O. L. Means, Shelbyville.	Adulterated with ground cocoanut shells
7730	Evansville Coffee Co., Evansville.	Ground olive stones present.
9035	R. A. Dunn, Stinesville.	Ground olive stones present.
9087	I. J. Rich, Washington.	Ground cocoanut shells present.
7279	J. A. Craig, Rushville.	Ground cocoanut shells present.

TOMATO CATSUP.

Old stocks of tomato catsup are still found at the grocery stores that are illegally labeled, or are colored and preserved. All new goods, however, conform to the requirements of the law in regard to labeling, and, if benzoate of soda is used as preservative, it is so stated on the label.

BEERS, WINES AND SUMMER DRINKS.

Of the 14 beers analyzed all were pure. The same statement is generally true of the non-alcoholic summer drinks, such as ginger ales, soda, etc. The use of preservatives has been entirely abandoned. Occasionally summer drinks are found sweetened with saccharin, but this imposition is but little practiced at the present time.

CARBONATED SOFT DRINKS—LEGAL.

Laboratory Number.	Brand.	Manufacturer.	Alcohol, Gms. Per 100 c. c.	Extract, Gms. Per 100 c. c.	Total Acids as Citric.	Volatile Acids as	Polarization.		Sucrose Gms. Per 100 c. c.	Immersion Reading.		
							Direct.	Invert.		Original.	Distillate.	Extract.
8754	Lemon Soda.	Yunker Bros.	.35	11.214	.054	.0000	+40.6	-11.2	9.7	58.9	15.0	59.0
8920	Pop.	O. W. Keefe, Attica.	0.0	8.279	.039	.0000	+34.0	-13.6	9.0	48.9	14.4	47.4
8926	Pop.	O. W. Keefe, Attica.	0.0	8.699	.000	.0000	+32.0	-7.4	7.5	48.8	14.2	49.0
8927	Pop.		0.0	8.070	.000	.0000	+16.4	-2.8	3.6	47.2	14.2	46.5
8928	Iron Brew.	C. E. Smith.	0.0	7.769	.000	.0000					14.0	45.3
8929	Lemon Soda.	O. W. Keefe, Attica.	.35	4.751	.000	.0000	+18.2	-5.2	4.5	33.3	15.0	33.3
8930	Lemon Sour.	Lebanon Bottling Works, Lebanon.	.21	7.869	.081	.0000	+12.0	-8.0	3.7	45.8	14.8	45.7
8931	Soda.	C. E. Smith.	.70	7.729	.027	.0012	+18.0	-11.2	5.5	43.5	15.5	43.4
8991	Iron Brew.	J. Metzger, Indianapolis.	0.0	7.592	.034	.0000	+19.8	-6.6	5.0	44.6	14.2	44.6
8993	Soda.	J. Metzger, Indianapolis.	.35	8.246	.109	.0006	+17.4	-10.0	5.1	47.5	15.0	47.2
8994	Iron Brew.	J. Metzger, Indianapolis.	.14	9.303	.130	.0000	+19.0	-8.0	5.1	51.5	14.7	51.4
8996	Dark Soda.	C. A. Habich Co., Indianapolis.	0.0	7.844	.061	.0000	+14.6	-7.0	4.0	45.6	14.6	45.6
8997	White Soda.	C. A. Habich Co., Indianapolis.	0.0	11.18	.150	.0006	+19.2	-14.0	6.2	59.2	14.4	58.9
9003	Chocolate Soda.	Fassatti & Co., Indianapolis.	0.0	8.372	.020	.0000	+31.0	-9.0	8.3	47.7	14.0	47.7
9004	White Soda.	Fassatti & Co., Indianapolis.	0.0	8.749	.014	.012	+34.6	-11.2	8.7	49.4	14.4	49.2
9005	Red Soda.	Fassatti & Co., Indianapolis.	0.0	6.939	.020	.0000	+28.4	-7.4	6.7	42.0	14.0	42.0
9072	Lemon Soda.	Aquos Water Co., Indianapolis.	0.0	10.158	.180	.0000	+27.0	-11.8	7.3	54.8	14.2	54.8
9163*	Blackberry Cordial.	I. Cienier, Indianapolis.	8.12	28.405	.57	.036	+6.5	+4.4	1.2		28.2	27.0
9164	Blackberry Brandy.	Farmer's Home, Indianapolis.	7.70	32.555	.30	.066	+65.6	+35.2	5.7		27.4	40.3
9243	White Pop.	Earl Adams, Terre Haute.	.21	3.496	.27	.0000	+3.2	-5.2	1.0	28.5	14.8	28.8
9244	Lemon Sour.	Earl Adams, Terre Haute.	0.0	8.070	.000	.0000	+18.0	-9.2	5.7	46.4	14.4	46.5
9245	Orange Cider.	Earl Adams, Terre Haute.	0.0	9.672	.000	.0000	0.0	-3.0	5.5	29.3	14.4	29.0
9246	Lemon Pop.	Henry Becker, Terre Haute.	0.0	9.454	.078	.0000	+25.4	-10.2	4.7	51.3	14.2	52.0
9247	Orange Pop.	Henry Becker, Terre Haute.	0.0	9.93	.190	.0000	+18.6	-2.6	4.0	52.9	14.4	53.9
9248	Hick's Cola.	J. T. Stork, Terre Haute.	.84	3.148	.000	.0000	-14.0	-14.0	0.0	00.0	16.2	00.0
9249	Orange Pop.	J. T. Stork, Terre Haute.	0.0	15.233	.190	.0000	+74.6	-11.0	4.8	76.0	14.3	75.0
9250	Cocoa Cola.	Edgar Coffin, Terre Haute.	0.0	8.623	.000	.0000	+0.0	-8.8	1.7	49.0	14.0	48.7
9251	Pepsin Soda.	Edgar Coffin, Terre Haute.	0.0	8.171	.013	.0000	+32.6	-9.4	7.9	47.0	14.2	46.9

*Improperly labeled.

†Contain glucose.

BEVERAGES—LEGAL.

Lab. No.	Article.	Manufacturer.
7015	Apple Juice.....	Freeman Grape Juice Co., Freeman, Ohio. Marshall Bottling Works, Springfield, Ill. F. P. Pyke, Indianapolis. C. C. Brandt & Co., Los Angeles. Mooney-Mueller Drug Co., Indianapolis. Crown Cordial Extract Co., New York.
7417	Grape Juice.....	
8008	Malt Ayle.....	
7987	Coffee.....	
7128	Chocolate Syrup.....	
7201	Lemon Juice.....	
7385	Rock Candy Syrup.....	
7399	Lemon Syrup.....	

BEVERAGES—ILLEGAL.

Lab. No.	Article.	Manufacturer.	Remarks.
7182	Strawberry Syrup.....	Red Cross Drug Store, Greencastle ...	Illegal, adulterated with salicylic acid.

GINGER ALE—LEGAL.

Laboratory Number.	Manufacturer.	Alcohol, Gms. Per 100 c. c.	Extract, Gms. Per 100 c. c.	Acids.		Polarization.		Sucrose, Gms. Per 100 c. c.	Immersion Reading @ 20° C.			Saccharin.	Benzoate Soda.	Salicylate Soda.
				Total as Citric.	Volatile as Acetic.	Direct.	Invert.		Original.	Distillate.	Extract.			
9002	C. E. Ritzler & Co., Dayton, Ohio.	0.0	10.158	.180	.0000	+27.0	-11.8	7.3	40.9	14.2	54.8	None....	None....	None.
9071	Aquos Distilled Water Co., Indianapolis.	.14	10.107	.170	.0006	+12.0	-12.0	4.5	55.9	14.7	54.6	None....	None....	None.
9190	Becker, Terre Haute.	0.0	7.114	.06	.0012	+20.0	-8.4	5.4	42.0	14.5	42.7	None....	None....	None.
8999	C. A. Habich & Co., Indianapolis.	.28	8.246	.150	.0000	+8.8	-9.8	3.7	46.5	14.9	47.2	None....	None....	None.
8998	A. C. Schuyler, New York.	.21	9.806	.163	.0012	+16.0	-11.4	5.2	52.6	14.8	55.4	None....	None....	None.
8690	Cantrell & Cochranes, Dublin, Belfast.	0.0	7.442	.109	.0024	+10.4	-7.6	4.4	43.0	14.5	44.0	None....	None....	None.
8751*	Klee & Coleman.	.21	3.218	.109	.0012	0.0	0.0	0.0	26.6	14.8	27.2	Present..	None....	None.

*Adulterated.

CANNED VEGETABLES.

Twenty samples of canned vegetables were examined. Of this number 16 were found to be good and four were adulterated with saccharin.

CANNED VEGETABLES—LEGAL.

Lab. No.	Article.	Brand.	Manufacturer.
7125	Kidney Beans.....	French Kidney Beans.....	Illinois Canning Co., Hoopestown, Ill.
7013	Sweet Corn.....	Tecumseh.....	Vincennes Canning Co.
7014	Sweet Corn.....	Tecumseh.....	Vincennes Canning Co.
7092	Sugar Corn.....	Ko-We-Ba.....	Kothe, Wells & Bauer, Indianapolis.
7126	Corn.....	American Corn.....	Grafton-Johnson, Greenwood.
7344	Corn.....		Williams Bros., Kokomo.
7396	Sugar Corn.....	Naomi.....	Naomi Canning Co., Edinburg, Ind.
7953	Sugar Corn.....	Elephant.....	Bloomington Canning Co.
8259	Corn.....	No. 814.....	Schnull & Co., Indianapolis.
8260	Corn.....	No. 376.....	Schnull & Co., Indianapolis.
8261	Corn.....	No. 815.....	Schnull & Co., Indianapolis.
8397	Corn.....	Sweet Meat.....	W. R. Allyn, Muncie.
8443	Corn.....	Orinda.....	Preston Rider, Columbus.
8482	Corn.....		Louis Dieckmann, Logansport.
10336	Corn.....		Franklin Canning Co., Franklin.
10336	Corn.....	Princess.....	Franklin Canning Co., Indianapolis.

CANNED VEGETABLES—ILLEGAL.

Lab. No.	Article.	Brand.	Manufacturer.	Remarks.
7361	Corn.....	Tip Top.....	Grafton-Johnson Co., Tipton..	Adulterated with saccharin.
7766	Corn.....		Indianapolis.....	Adulterated with saccharin.
7467	Petit Pois.....		Leari & Nicholi, Indianapolis..	Adulterated with saccharin.
8409	Corn.....	Fame.....	Greenwood.....	Adulterated with saccharin.

VINEGARS.

The adulteration of cider vinegar still continues. Of 87 samples analyzed 43, or 49.4 per cent., were adulterated. This figure is a great improvement over the report of last year, but still falls far short of what should obtain in a state devoted largely to the production of fruit. The greater number of cider vinegars reported as illegal were manufactured by farmers. It is possible for standard cider vinegar to be produced on the farm, but it is not probable that such vinegar will be made if the present lax and ignorant methods of manufacture continue to be followed. Cider vinegar cannot be made by allowing cider to ferment and then acetify, unless conditions of ventilation and temperature are carefully watched. Of the 9 samples of colored distilled vinegar analyzed, all were pure.

Lab. No.	Brand.	Manufacturer or Dealer	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.
7098	Cider.....	Westville.....	5.43	3.156	.368	38.0	-6.2	Medium.....	Normal
7099	Cider.....	Westville.....	4.26	7.115	.497	44.0	-16.4	Heavy.....	Normal
7100	Cider.....	Westville.....	5.97	2.735	.415	42.0	-1.8	Medium.....	Normal
7118	Pure Cider.....	Red Cross Cider Vinegar Co., St. Louis, Noblesville.	4.17	2.410	.255	28.0	+	Slight.....	Normal
7136	Reagan & Carter.....	4.12	2.192	.323	30.0	+	Heavy.....	Normal
7070	O. E. Tower, Martinsville.....	4.34	3.280	.440	28.0	-2.0	Heavy.....	Normal
7193	Cider.....	Faulkner Co., Indianapolis.....	4.25	2.138	.350	36.0	+2.4	Normal.....	Normal
7200	Pure Cider.....	Fred Knoop, Oak Park, Ill., Indianapolis.....	4.14	2.065	.342	22.0	-2.2	Heavy.....	Normal
7290	Rush Co. Grocery Co., Rushville.....	4.91	2.213	.335	32.0	-2.0	Very heavy.....	Normal
7302	Cider.....	Red Cross Vinegar Co., St. Louis, Richmond.....	4.51	2.212	.265	22.0	-1.0	Normal.....	Normal
7548	The Huttman Co., Indianapolis, Frankfort.....	4.37	.....	.....	.....	.....	.....	.....
7577	Benton Harbor, Mich.....	5.43	2.653	.379	38.0	0.0	Moderate.....	Normal
7578	Pure Cider.....	Union City.....	4.02	2.500	.250	24.0	-0.6	Moderate.....	Normal
7780	Heinz, Evansville.....	5.69	2.556	.338	32.0	-2.4	Normal.....	Natural
7787	Heinz, Evansville.....	4.67	3.045	.438	40.0	-0.0	.....	.....
8102	Arcadia.....	4.67	.....	.....	.....	.....	.....	.....
8103	Arcadia.....	9.51	.....	.....	.....	.....	.....	.....
8104	Arcadia.....	4.98	.....	.....	.....	.....	.....	.....
8663	P. C. Hoffman, Ft. Wayne.....	5.00	2.193	.328	28.0	-2.0	Very heavy.....	Normal
8669	Harbaner Co., Toledo, Ohio.....	3.96	2.085	.350	28.0	-2.8	Normal.....	Normal
8671	I. Freiburger, Ft. Wayne.....	4.28	1.857	.300	30.0	-4.4	Normal.....	Normal
8675	E. Helentke, Ft. Wayne.....	4.93	2.280	.400	30.0	-8	Very heavy.....	Normal
8873	J. R. Fleming, Franklin.....	4.23	2.700	.328	26.0	+ -0.0	Medium.....	Normal
8903	Red Cross Cider Vinegar Co., St. Louis.....	4.02	2.371	.282	24.0	0.0	Normal.....	Normal
8923	Albion Cider Vinegar Co., Indianapolis.....	4.02	2.418	.277	14.0	.....	Very slight.....	Normal
9058	Bloomington Pickle Co., Bloomington, Ill.....	4.16	2.415	.439	22.0	-2.2	Heavy.....	Slightly decolorized
9060	Cabel & Kaufman, Washington.....	4.22	1.864	.364	14.0	0.0	Heavy.....	Slightly decolorized
9117	Henry E. Johnson, Salem.....	4.34	3.315	.355	40.0	0.0	None.....	Caramel
9120	W. J. Hauger, Salem.....	4.42	3.575	.390	30.0	-6	Normal.....	Natural
9124	Gun, Neal, Salem.....	4.16	2.436	.388	30.0	-4	Heavy.....	Natural
10127	Smith & Riggs, Princeton.....	4.07	1.794	.325	14.0	-1.4	Heavy.....	Normal
10129	Sprague-Wagner & Co., Chicago.....	4.07	2.270	.347	27.0	+0.0	Heavy.....	Normal
9634	Peru.....	5.13	2.450	.190	34.0	-0.6	Heavy.....	Normal
9639	Heinz & Co., Pittsburg.....	5.02	2.815	.420	42.0	+ -0.0	Heavy.....	Normal
9403	J. H. Brown, New Albany.....	5.02	2.380	.300	26.0	-2.6	Very heavy.....	Normal
9405	W. R. Graves, New Albany.....	4.37	2.080	.185	24.0	+	Heavy.....	Normal
9406	William Henry, New Albany.....	4.37	2.210	.282	28.0	-0.0	Heavy.....	Normal
9629	Grocer's Supply Co., Indianapolis.....	5.19	2.140	.285	.....	-4.0	Heavy.....	Normal
9631	S. C. Goff, Shelbyville.....	4.13	0.200	.325	2.0	+1.0	.....	Caramel
9831	O. L. Meaus, Shelbyville.....	4.08	2.200	.340	24.0	-1.0	Heavy.....	Normal
8376	L. J. Place, Newport.....	4.08	.....	.....	.....	.....	.....	.....
8377	Mulberry.....	4.32	.....	.....	.....	.....	.....	.....
9333	Ft. Wayne.....	4.25	.....	.....	.....	.....	.....	.....

GRAIN VINEGAR—LEGAL.

Lab. No.	Manufacturer.	Where Collected.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.
7767	.....	Kokomo.....	5.52	.....	.....	.....	.....	.....	.....
7768	.....	Kokomo.....	5.68	.....	.....	.....	.....	.....	.....
7867	Urney & Kinser.....	Bloomington.....	4.29	.0239	0.04	2.0	+ .4	None...	Caramel

DISTILLED VINEGAR—LEGAL.

Lab. No.	Manufacturer.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.
7767	J. J. Foster, Kokomo.....	5.52	.....	.....	.....	.....	.....	.....
7768	J. J. Foster, Kokomo.....	5.68	.....	.....	.....	.....	.....	.....
7867	Urney & Kinser, Bloomington.....	4.29	0.239	0.04	2.0	+ .4	None...	Caramel
8932	Faulkner Preserve Co., Indianapolis.....	9.6	.....	.....	.....	.....	.....	.....
9053	H. F. Vollmer, Washington.....	4.6	.27	0.027	4.	0.0	None...	Caramel
9054	I. J. Rich, Washington.....	4.09	.052	.030	2.	0.0	None...	Caramel

MISCELLANEOUS FOOD PRODUCTS.

Under this head is placed a variety of subjects. Of the 82 samples examined, 72 were good and 10 were bad, equivalent to a percentage of adulteration of 12.1 per cent.

DRUGS.

During the year 598 samples of drugs have been collected and analyzed. Of this number 296 have been pure and 302, or 50.9 per cent., have been adulterated. During 1906 the percentage of adulteration was 62.5 per cent. A slight increase in percentage of purity is noted, but conditions have not improved along the line of drugs as satisfactorily as with food products. The reason for the low grade of drugs is difficult to explain. The wholesale drug trade in Indiana is in the hands of reliable, conscientious, successful merchants. The retail druggists are, as a rule, men of high standing in the community. The wholesale trade has taken many precautions since the passage of the Pure Food Law to eliminate from their stock all goods not of U. S. P. strength, or goods improperly labeled, and we believe the retailer has, so far as he has been able, taken from his stock every preparation the character of which he did not know. In order to determine, if possible, why drugs are so heavily adulterated, in so far as an explanation from the retailer will show, we sent to 404 dealers warning notices describing the character of goods purchased from their stock that were found to be illegal, and asked them to explain these results. Of the warning

notices sent out we have received 312 replies. An examination of these replies reveals some very interesting conditions. Thirty-eight retailers gave an explanation for the composition of their lime water; 17 of them acknowledged carelessness in manufacture or storage, and nine stated that they used lime water tablets. Ninety-nine dealers whose tincture of iodine was found to be below standard attributed that fact to improper storage or to careless manufacture, improper solution, etc. Nineteen dealers used old formulas which did not call for the addition of potassium iodide. In two cases the clerk's error was evidently responsible for the results. Fifty-nine druggists explained the fact that their tincture of iron was below standard by stating that they purchased a solution of chloride of iron from the wholesaler and diluted according to formula. Ten admitted careless manufacture or storage and 7 the use of an old formula. Nine could give no explanation; one was made by the former owner of the store; 16 blamed the wholesaler for crude drugs or fluid extract; one said it was the fault of his clerk, and one was made from old stock. It is impossible to draw any conclusion from the analyses as to the quality of the solution chloride of iron handled by the wholesaler. Their formula calls for dilution, and if the retailer follows directions, goods so diluted should be up to standard. Thirty-six replies from Tr. of Capsicum show five to have been made from an old formula; 3 could give no explanation; 3 admitted carelessness in preparation or dispensing; 2 were made by former owners of stores; 17 laid it to the door of the wholesaler in furnishing drugs that were not right; one said it was the fault of his clerk; 3 were made from old stock, one used maceration instead of percolation, and one said the alcohol had evaporated. Carelessness in preparing was the cause for one sample of Tr. of Ginger being below standard; one was the fault of the wholesaler in selling impure drugs; one was made from old stock, and one was made from ginger root. In the case of Spirits of Camphor, two used old formulas. Ten could not explain; one said it was carelessness in preparing or dispensing, and one was made by a former owner; two said it was the wholesaler who was to blame; one was the fault of a clerk; one suggested that the camphor gum might have contained paraffin; one said it was caused by faulty calculation; two said formula was incorrect, and two laid it to their scales. Sixteen retailers explained the illegal sale of black antimony by saying that they bought the goods from the wholesaler and supposed the goods to be pure. One retailer stated that he paid 12 cents a pound for a preparation, which, upon

analysis, proved to be coal dust; this is at the rate of \$144 a ton, a rather expensive price for slack coal. Forty-five dealers reporting as to the quality of their precipitated sulphur, in every case stated that they purchased pure goods from the wholesaler. It is apparent that the trade in black antimony and in precipitated sulphur is entirely demoralized. There is no reason why either one of these articles should be furnished a retailer in other than a pure state. The fact that the preparations are used in veterinary practice or in ointments has no bearing on the case at issue. Carelessness in manufacture and the storage of preparations such as lime water, tincture of iodine and tincture of iron in loosely stoppered bottles seems to be the most reasonable explanation for failure on the part of the retailer to comply with the law. The use of old formulas and pharmacopoeias of an edition abandoned twenty years ago also explains many results that seem impossible to the druggist who uses every care in compounding his preparations. In only three instances does the retailer lay the quality of his goods to the clerk's error, and in no case did the dealer admit wilful illegal sale. The conclusion to be drawn from this brief summary of facts is that the retail drug trade should observe more care in the preparation of its goods, discard old formulas, buy pharmacopoeias of the latest edition and insist upon guarantees of purity from the wholesaler with whom it deals. The purchaser of drugs, whether he be physician or layman, can take cognizance of none of these explanations. He expect to obtain pure and standard goods, and it must be the duty of the retailer to dispense to him what he requires and pays for.

Inspectors report sanitary conditions of drug stores to be on the whole satisfactory. Occasionally proprietors are found who do not realize as they should the necessity for cleanliness, especially around the soda fountains. Many fountains have been inspected which were in a dirty and unsanitary condition. One inspector reports 50 draft tubes to be stopped up with accumulated dirt and sediment; another that a dead rat was found in the base of the fountain. A drug store is, from the very character of the business, an attractive place. Clean floors, polished counters, shining mirrors, neatly arranged rows of shelf bottles are found in every modern drug store. The prescription case, usually out of sight of the customer, is not so carefully cared for in many instances, nor is the stock room or cellar always properly kept. Of 892 drug stores inspected during the year, not a single one was found to be in bad condition. Twenty-nine were found to be uncleanly and therefore classed as poor; 270 were in fair shape; 521 were good and 72

were in excellent condition. Second inspections show a decided improvement, and at the end of another year's work, it is probable that there will be no further necessity for sanitary inspections of drug stores. The stocks of patent and proprietary articles are changing complexion rapidly under the influence of the new Federal requirements, and appear in a guise so strange and new as hardly to be recognized. Stocks of goods on hand at the present time do not require any statement on the label as to the alcohol, opium, cocaine and morphine content until March 1, 1908. It is advisable, however, that all druggists take steps at once to dispose of these old stocks, so that when the drug law goes into full effect, it will not be necessary for the department to condemn quantities of unsold goods.

LIME WATER. (LIQUOR CALCIS.)

Fifty-seven samples of lime water were analyzed during the year. Of this number 29 were of U. S. P. strength and 38 were below standard. This is equivalent to a percentage of adulteration of 56.7 per cent. One year ago the percentage of adulteration was 45.1 per cent. These figures indicate a more serious condition at the present time with the Pure Food and Drug Law in active operation, than before it went into effect. There is absolutely no excuse for this condition, and no druggist should escape the responsibility placed upon him by the law, when he prepares and dispenses a medicine of very little cost, which is to be used in treating infantile disorders, that does not conform to the strictest pharmacopoeial requirements. Many druggists are disposed to ignore or treat lightly the fact that they are dispensing an impure lime water. Others, realizing the seriousness of their fault, have said that it was impossible to buy a lime that would make a standard water, and that the pharmacopoeial requirements were too stringent. In order to determine the truth of this assertion, 7 samples of lime, purchased from the lime yards at the city of Indianapolis, were used in preparing lime water. The results are given in the table below.

LIME WATER (LIQUOR CALCIS), PREPARED FROM LIME COLLECTED FROM INDIANAPOLIS COMPANIES.

No.	Variety of Lime.	From Whom Purchased.	Date of Purchase.	Date of Preparation.	$\frac{n}{16}$ H ₂ SO ₄ CC.	U.S.P. %.
1	Portland.....	A. B. Meyer & Co.....	8-15-1907	9-26-1907	18.1	95.2
2	Huntington.....	Aldag & Coonse.....	8-15-1907	9-26-1907	17.8	93.6
3	Huntington.....	Frank M. Dell.....	8-15-1907	9-26-1907	18.6	97.8
4	Bedford.....	Pierson Building Co.....	8-15-1907	9-26-1907	22.4	118.1
5	Blue River and Mitchell slacked..	Indianapolis Mortar Co.	8-15-1907	9-26-1907	21.7	114.2
6	Huntington.....	Wales Coal Co.....	8-15-1907	9-26-1907	19.8	104.2
7	Huntington.....	Malott Coal Co.....	8-15-1907	9-26-1907	19.9	104.7

Forty-one days elapsed between the purchase of the lime and its preparation. The lime was in different shapes and of decidedly different grades, and one sample was slacked; yet, in spite of these conditions, all of which could be improved upon by the druggist, the lowest sample analyzed gave a U. S. P. value of 93.6 per cent., while the highest was 118.1 per cent. pure. Even the slacked lime produced a lime water 14.2 per cent. stronger than was required.

LIME WATER—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.
9208	Charles Coonley & Co., South Bend.....	115.5
9241	Aug. Schreiber & Son, Tell City.....	106.3
9636	L. E. Green, Connersville.....	112.6
9640	O. Elliott, Connersville.....	105.2
9697	E. Gackenhaimer, Wabash.....	104.2
9817	Simon Herr, Brazil.....	106.3
10168	J. B. Wehrle, Anderson.....	123.6
10169	J. A. Rust, Anderson.....	120.0
10170	W. C. Roush, Anderson.....	105.7
10171	E. T. Brickley, Anderson.....	113.6
10173	George A. Cock, Anderson.....	106.4
8052	Sheridan's Pharmacy, Evansville.....	113.6
8147	H. E. Zimmer, Indianapolis.....	116.8
8156	Hoskins & Miller, Indianapolis.....	103.1
8174	J. T. Fogas, Indianapolis.....	110.5
8198	J. D. Pierson, Indianapolis.....	109.4
8428	J. J. Brink, Ft. Wayne.....	103.1
8592	M. M. Murphy, Delphi.....	118.9
8765	Baur Pharmacy, Terre Haute.....	104.7
8832	O. H. Mennet, Columbus.....	108.4
8834	Ernest Stahlbuth, Columbus.....	114.7
8836	H. M. Holmes, Columbus.....	109.9
8886	D. H. Miller, Franklin.....	104.2
8887	W. B. McCollough, Franklin.....	105.2
9067	Smith & Winton, Washington.....	103.6
9075	H. J. Linderman, Washington.....	113.6
9090	B. Seal & Co., Loogootee.....	112.6
6986	Chas. W. Eichrodt, Indianapolis.....	115.7
6988	E. H. Wilson, Indianapolis.....	111.5
6992	Empire Drug Store, Indianapolis.....	114.7
7028	Haag's Pharmacy, Indianapolis.....	111.5
7039	Carnefer Bros., Indianapolis.....	116.9
7223	West Baden Springs Drug Co., West Baden.....	107.3
7227	McCoy Drug Co., French Lick.....	121.0
7231	Julius Hoag, Indianapolis.....	111.6
7245	W. H. Burget, Indianapolis.....	120.0
7356	Herman E. Franer & Co., Indianapolis.....	113.6
7436	Wm. Rudder & Co., Salem.....	122.1
7439	Robertson Drug Store, Salem.....	113.6
7455	C. E. Creclins, New Albany.....	124.2
7461	Wm. C. Pauf, Jeffersonville.....	101.0
7465	Floyd Parks, Jeffersonville.....	122.1
7852	A. G. Schlueher, East Chicago.....	116.8
7943	The Lafayette Pharmacal Co., Lafayette.....	120.0

LIME WATER—ILLEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.	Remarks.
7029	E. W. Tompkins, Indianapolis.....	128.42	Adulterated.
7050	W. E. Axline, Noblesville.....	96.84	
7120	A. G. Baldwin, Noblesville.....	135.7	Not a pure lime water
7303	A. G. Luken & Co., Richmond.....	33.68	
7359	Ferd. A. Mueller, Indianapolis.....	74.7	
7371	A. E. Creelius, New Albany.....	0.0	
7614	R. L. Lander, Marion.....	78.8	
8150	H. J. Huder, Indianapolis.....	60.0	
8203	Wm. F. Werner, Indianapolis.....	96.8	
8829	T. E. Otto, Columbus.....	88.4	
8540	Horace W. Harbaugh, Attica.....	73.6	
9306	L. J. Lacey & Son, Jasonville.....	65.2	
9649	S. O. McKennan, Connersville.....	91.0	
9651	L. Ashworth, Connersville.....	57.9	
9683	R. E. Clark, Wabash.....	27.3	
9709	K. Bockman, Wabash.....	45.7	
9717	Bradley Bros., Wabash.....	79.4	
10357	V. E. Silverburg, Muncie.....	91.05	
7605	Freel & Mason, Marion.....	38.9	
7611	C. H. Overman, Marion.....	48.4	
8158	B. T. Fisher, Indianapolis.....	10.0	
7540	J. R. Erganbright, Indianapolis.....	22.1	

LIME WATER TABLETS—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.
10378	_____, Rochester.....	103.6
10377	_____, Indianapolis.....	121.5

LIME WATER TABLETS—ILLEGAL.

7928	_____, Indianapolis.....	38.9
8921	_____, Indianapolis.....	19.5
9898	_____, Indianapolis.....	75.2

GLYCERINE.

Eight samples of glycerine were analyzed. Six of these samples were below standard. The character of the glycerine on the market is the same as last year. No evidence of fraud on the part of the retailer is evinced, but these unsatisfactory results do indicate carelessness on the part of the wholesale trade supplying this article.

GLYCERINE—LEGAL.

Lab. No.	Retailer.	H ₂ SO ₄ .	Butyric Acid.	Sulphates.	Specific Gravity.
8045	B. S. Muller, Evansville.....	Brown color..	Present.....	Trace.....	1.2448
7621	Hildebrand & Ansley, Marion.....	Light straw...	Present.....	Present.....	1.2561

GLYCERINE—ILLEGAL.

7081	_____, Indianapolis.....	Brownish.....	Present.....	Trace.....	1.255
7090	Louis Stockman, Indianapolis.....	Brownish.....	Present.....	Trace.....	1.254
7232	Julius Hoag, Indianapolis.....	Yellowish.....	Present.....	Trace.....	1.2474
7250	H. O. Atchinson, Indianapolis.....	Yellowish.....	Present.....	Very slight trace...	1.2471
7631	J. W. Hoover, Jeffersonville.....	Light straw...	Present.....	Trace.....	1.2482
7721	Fred M. Petersheim, Evansville.....	Brownish.....	Present.....	Trace.....	1.2537

WITCH HAZEL. (AQUA HAMAMELIDIS.)

Seven samples of witch hazel were analyzed. Six were U. S. P. and one was below standard. The use of formaldehyde as a preservative in witch hazel is evidently somewhat common.

WITCH HAZEL—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume at 20° C.	Specific Gravity.
7955	E. B. Merritt, Frankfort.....	12.63	
8906	C. H. Albersmeyer, Ft. Wayne.....	13.4	
9693	E. W. Swadley, Wabash.....	13.49	.9805
9701	E. Gackenheimer, Wabash.....	13.49	.9805
9711	K. Bockman, Wabash.....	13.19	.9807
9720	Bradley Bros., Wabash.....	14.89	.9790

WITCH HAZEL—ILLEGAL.

Lab. No.	Retailer.	Alcohol by Volume at 20° C.	Remarks.
8432	C. W. Albesmeyer, Ft. Wayne.....	12.3	Formaldehyde present.

TINCTURE ARNICA. (TINCTURA ARNICAE.)

Seventeen samples of Tr. of Arnica analyzed all proved to be in accordance with the pharmacopoeia requirements. No sample contained wood alcohol.

TINCTURE OF ARNICA—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Solids per 100 C.C.	Specific Gravity.
*7570	W. F. Peters, Seymour.....	24.7	3.71	.9863
8430	J. J. Brink & Son, Ft. Wayne.....	36.2	1.41	
8458	George W. Haynie, Evansville.....	40.1	2.19	
8456	Charles Dawson, Mt. Vernon.....	38.0	3.00	
8450	D. & H. Rosenbaum, Mt. Vernon.....	34.2	3.68	
9685	R. E. Clark, Wabash.....	40.7	3.14	.9520
8660	Wm. H. Peters, Madison.....	38.6	3.25	.9535
8711	John M. Dils, North Vernon.....	43.2	2.57	.9475
8713	G. W. Bantz, North Vernon.....	41.3	3.23	.9510
9237	G. S. Dusch, Tell City.....		4.02	.9586
9685	R. E. Clark, Wabash.....		3.60	.9509
9690	E. W. Swadley, Wabash.....		3.19	.9477
9699	E. Gackenheimer, Wabash.....		3.23	.9489
9706	White Drug Store, Wabash.....		3.50	.9572
9719	Bradley Bros., Wabash.....		2.61	.9458
7224	Sloan Drug Co., French Lick.....	40.3	2.77	.9520
7457	M. F. Doherty, Jeffersonville.....	43.6	1.49	.9425
7566	W. F. Meyer, Seymour.....	46.2		

*Very low in alcohol.

SPIRITS OF CAMPHOR. (SPIRITUS CAMPHORAE.)

Sixty-five samples of Spirits of Camphor were analyzed. Fifteen were pure and fifty were below standard, equivalent to an adulteration of 76.9 per cent. Spirits of Camphor is below strength either because of the use of a smaller amount of camphor than is required, or of dilute alcohol. The high price of camphor gum is, no doubt, in part responsible for the inferior grade of camphor sold. There is also a disposition on the part of some druggists to sell a dilute product in order to meet the competition of the grocery store dispenser of camphor water.

SPIRITS OF CAMPHOR—LEGAL.

Lab. No.	Retailer.	U. S. P. Strength Camphor.	Alcohol by Volume.	Specific Gravity.
7022	Fred A. Mueller, Indianapolis.....	100.0		
7045	Cain & Llewellyn, Indianapolis.....	115.0	87.4	
7046	F. J. Wehrel, Indianapolis.....	105.0	87.2	
7071	Ernest C. Stowers, Indianapolis.....	100.0	89.7	
7216	Maurice Schwartz, Indianapolis.....	100.0	88.2	
7307	J. S. Adams, Richmond.....	105.0	82.0	
7374	C. D. Knofel, New Albany.....	171.6		
8707	C. F. Harper & Co., Madison.....	100.8	84.1	
8828	T. E. Otto, Columbus.....	100.0	81.6	
9184	W. H. Rogers, Madison.....	108.3	85.3	
9236	C. S. Dusch, Tell City.....	100.0	85.8	
9635	L. E. Green, Connersville.....	100.8	85.3	.8315
9700	E. Gackenheimer, Wabash.....	112.5	85.8	.8312
10265	W. G. Sims, Swayzee.....	112.5	82.5	.8325
10272	P. R. McLeod, Summittville.....	108.3	79.2	.8387

SPIRITS OF CAMPHOR—ILLEGAL.

9747	Reed & Batey, Sullivan.....	32.5	43.2	
7052	A. G. Baldwin, Noblesville.....	89.2	56.1	
7074	Alexander B. Gauld, Indianapolis.....	79.2	68.2	
7087	Robert Navin, Indianapolis.....	75.0	54.6	
7089	Louis Stockman, Indianapolis.....	96.6	88.7	
7234	Julius Hoag, Indianapolis.....	66.6	90.4	
7247	W. H. Burget, Indianapolis.....	97.5	69.9	
7249	H. O. Atchinson, Indianapolis.....	70.8	89.7	
7363	J. H. Conner & Co., New Albany.....	80.0	77.4	
7435	H. C. Hobbs, Salem.....	91.6	81.0	.8500
7511	R. Walter, Lawrenceburg.....	40.0	61.2	.9043
7525	C. W. Fitch, Lawrenceburg.....	75.0	67.8	.8862
7574	C. W. Milhouse, Seymour.....	79.1	88.2	.8283
7571	W. F. Peter, Seymour.....	80.0	89.2	.8270
7764	—, Seymour.....	95.8	87.7	.8315
7609	C. H. Overman, Marion.....	87.5	87.4	.8336
7887	C. O. Maple, Bloomington.....	85.8	84.0	.8343
7889	Thos. J. Penrod, Bloomington.....	73.3	69.3	.8785
8431	C. W. Albersmeyer, Ft. Wayne.....	85.0	85.6	
8664	W. H. Rogers, Madison.....	69.1	58.8	
8710	John M. Dils, North Vernon.....	80.8	86.7	
8717	Don Davis, North Vernon.....	86.6	84.6	
8820	Hauser & Parker, Columbus.....	83.3	84.1	
8712	G. W. Bantz, North Vernon.....	51.6	46.0	
9211	—, South Bend.....	84.1	87.0	.8243
9216	C. W. Taulman, Corydon.....	73.3	81.0	
9223	L. A. Riley & Son, Corydon.....	90.8	84.6	
9235	E. R. Brundick, Huntingburg.....	85.0	87.0	
9345	E. F. Cumming, Cannelton.....	84.1	85.6	
9361	Bohrer Drug Co., Boonville.....	85.0	82.3	
9591	O. L. Bishop, Shelbyville.....	72.5	83.6	.8418
9594	S. H. Heustis, Shelbyville.....	76.6	88.7	
9601	Robt. W. Buxton, Shelbyville.....	84.1	85.8	.8243
9603	Stanley Jones, Shelbyville.....	95.8	57.6	.9014

SPIRITS OF CAMPHOR—ILLEGAL—Continued.

Lab. No.	Retailer.	U. S. P. Strength Camphor.	Alcohol by Volume.	Specific Gravity.
9639	O. Elliott, Connersville.....	58.3	50.6	.9163
9650	S. O. McKennan, Connersville.....	96.6	87.0	.8307
9653	L. Ashworth, Connersville.....	62.5	57.6	.9077
9694	E. W. Swadley, Wabash.....	67.5	86.1	.8305
9710	K. Bockman, Wabash.....	99.1	81.7	.8360
9721	Bradley Bros., Wabash.....	84.1	79.5	.8506
10248	W. B. Teeter, Upland.....	85.0	84.4	.8272
10278	Howard Bros., Summittville.....	60.8	47.0	.9208
10268	Lawshe Drug Store, Swayzee.....	92.5	83.3	.8300
10259	Fred Drake, Van Buren.....	72.5	64.1	.8837
10257	Conwell & Son, Van Buren.....	91.6	81.8	.8325
10002	Shadel's Drug Store, Plymouth.....	72.5	84.4	.8277
9992	The People's Drug Store, Plymouth.....	88.3	82.5	
10033	Ed. Smith, New Castle.....	66.6	74.1	.8568
10360	D. P. Campbell & Bro., Muncie.....	87.5	82.5	.8325
8719	O. W. Stephenson, Orleans.....	29.1	43.2	

TINCTURE OF CAPSICUM. (TINCTURE CAPSICI.)

Of the ninety-six samples of Tr. of Capsicum analyzed, 43 were pure and 53 adulterated. This is equivalent to a percentage of adulteration of 55.2 per cent. Tr. of Capsicum should contain at least one gram of extract to the 100 cc. and should contain about 90 per cent. of alcohol. Many samples were found to be colored either with turmeric or coal tar dye. This has been particularly true of tinctures prepared by the dispensing druggist from powdered capsicum, and the results can only be explained by the fact that much of the powdered drug heretofore sold has been of inferior stock partially exhausted and dyed to improve its appearance.

TINCTURE OF CAPSICUM—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Solids per 100 C.C.	Specific Gravity.
7011	J. C. Clark, Indianapolis.....		1.78	
7044	Cain & Llewellyn, Indianapolis.....	86.7	1.28	
7047	F. J. Wehrel, Indianapolis.....	88.7	1.71	
7214	Duckworth Pharmacy, Indianapolis.....	87.2	1.66	
7458	Schwaninger Bros., Jeffersonville.....	90.7	1.33	.8348
7523	C. W. Fitch, Lawrenceburg.....	89.2	1.10	.8263
7524	C. R. Mills, Lawrenceburg.....	83.4	1.17	.8478
7526	Mark Kennedy, Lawrenceburg.....	85.3	3.04	.8422
7541	French Lick Drug Co., French Lick.....	87.5	2.47	.8453
7573	C. W. Millhouse, Seymour.....	85.0	1.61	.8426
7644	Ben Doolittle, Jeffersonville.....	84.2	1.61	.8442
7724	Meek & Albers, Evansville.....	83.1	1.77	
7735	John Laval & Sons, Evansville.....	85.8	1.36	
7879	Bowles Bros., Bloomington.....	85.0	1.49	
8060	L. Wolfgang, Evansville.....	85.0	2.40	
7725	Meek & Albers, Evansville.....	83.1	1.66	
8425	B. R. Noll, Ft. Wayne.....	81.4	1.19	
8457	Geo. W. Haynie, Evansville.....	81.7	1.76	
8716	Don Davis, North Vernon.....	81.2	1.16	
8718	O. W. Stephenson, Orleans.....	85.3	1.12	
8827	T. E. Otto, Columbus.....	83.3	2.76	
8830	C. W. Adams, Columbus.....	84.2	2.89	
8888	W. B. McCollough, Franklin.....	81.3	2.26	
9068	Smith & Winton, Washington.....	84.2	2.42	.8429
9079	A. F. Schmidt, Washington.....	82.7	2.00	.8372
9209	Charles Conoley & Co., South Bend.....		2.40	.8342
9953	Tarleton & Tilford, Martinsville.....	79.1	2.02	.8493

TINCTURE OF CAPSICUM—LEGAL—Continued.

Lab. No.	Retailer.	Alcohol by Volvme.	Solids per 100 C. C.	Specific Gravity.
9955	Edgar Tarleton, Martinsville.	81.4	1.77	.8475
9964	Carleton's Drug Store, Martinsville.	84.1	1.94	.8393
10054	T. C. Basye, Rockport.	85.6	2.17	.8260
10091	Otto Kloefer, Michigan City.	80.3	1.57	.8523
10092	E. W. Lindemann, Michigan City.	82.4	3.21	.8418
10228	Eli Lilly Company, Indianapolis.	89.6	1.81	.8177
10324	P. M. Shore, Rochester.	89.4	1.11	.8210
10379	Weber Drug Company, Indianapolis.	83.4	2.59	.8385
10380	Huder's Pharmacy, Indianapolis.	85.1	2.57	.8382
10381	Francis Pharmacy, Indianapolis.	83.6	2.52	.8380
10382	Brink's Pharmacy, Indianapolis.	81.6	2.58	.8381
10402	Jno. B. Burrell, Brownstown.	89.6	1.17	.8188
10407	O. R. Emerson, Brownstown.	88.5	1.85	.8210
9645	F. S. Leadbetter, Connersville.	83.4	1.63	.8412
9686	E. W. Swadley, Wabash.	83.6	1.71	.8405
9695	E. Gackenheimer, Wabash.	83.1	2.15	.8410

TINCTURE OF CAPSICUM—ILLEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Solids per 100 C.C.	Specific Gravity.	Remarks.
10411	Samuel M. Smith, Osgood.	53.5	2.01	.9212	Below standard.
10147	Jos. F. Schaffer, Poseyville.	88.2	0.35	.8277	Below standard.
10126	H. G. May, Princeton.	83.8	0.58	.8378	Coal tar dye present.
10124	F. J. Biggs, Princeton.	90.3	0.78	.8187	Below standard.
10122	Clark & Son, Princeton.	60.1	3.35	.9139	Below standard.
9959	Roy Rigrish, Martinsville.	72.7	2.56	.8745	Alcohol below standard.
10409	R. J. Stillwell, Brownstown.	55.5	1.99	.9205	Below standard.
10314	Alex. Ruh, Rochester.	50.8	2.18	.9302	Below standard.
10306	Geo. V. Davis, Rochester.	63.5	1.95	.8960	Alcohol below standard.
9957	J. M. Carleton, Martinsville.	85.6	0.86	.8351	Low in extract.
9716	Bradley Bros., Wabash.	69.1	1.28	.8822	Alcohol too low.
9705	White Drug Store, Wabash.	82.4	1.59	.8423	Colored with tumeric.
9684	R. E. Clark, Wabash.	83.9	0.72	.8325	Extract too low.
10383	Ferger Pharmacy, Indianapolis.	84.5	1.83	.8370	Tumeric and coal tar color
9062	L. F. Nunemair, Washington.	84.6	1.04	.8282	Colored with tumeric.
9078	J. N. Jones, Washington.	68.5	1.58	.8803	Low in alcohol.
9094	Smith's Pharmacy, Loogootee.	43.6	0.80	.9412	Low in alcohol and solids.
9232	A. H. Miller, Jr., Huntingburg.	89.0	0.53	.8185	Low in solids and colored.
9354	J. A. Sargent, Rockport.	47.1	0.64	.9335	Low in alcohol and solids.
9356	T. C. Basye, Rockport.	.....	0.78	.8423	Low in solids.
9359	L. W. Owens, Boonville.	91.4	0.35	.8170	Low in solids.
9362	Bohrer Drug Co., Boonville.	83.4	0.42	.9307	Coal tar color.
9363	Demberger Drug Co., Boonville.	87.9	0.65	.8397	Low in solids.
9746	Reed & Batey, Sullivan.	87.9	0.64	.8236	Low in solids.
10143	Ed. Shoptaugh, Princeton.	71.8	2.94	.8720	Alcohol low.
7220	Sherrod & Ludley, West Baden.	88.9	0.83	.8357	Low in solids.
7401	Wm. Manning, Greentown.	69.3	0.67	.8846	Low in solids and alcohol.
7437	Wm. Rudder & Co., Salem.	94.9	0.70	.8397	Below standard.
7442	Chas. McClintock, Salem.	88.7	0.73	.8186	Below standard.
7456	M. F. Doherty, Jeffersonville.	90.2	0.99	.8355	Low in solids.
7672	Ernest C. Stowers, Indianapolis.	90.4	0.71	.....	Low in solids.
7073	Alexander B. Gauld, Indianapolis.	91.5	0.74	.....	Low in solids.
7083	James R. Cole, Indianapolis.	86.1	0.80	.....	Low in solids.
8890	R. C. Wood & Son, Franklin.	45.5	1.17	.....	Very weak and low in alcohol
8882	C. H. Drybread, Franklin.	84.2	0.94	.....	Tumeric color.
8885	D. H. Miller, Franklin.	84.9	1.70	.....	Tumeric color.
8825	T. J. Noblett, Columbus.	41.2	0.96	.....	Low in solids and alcohol.
8721	Troth Bros., Orleans.	82.7	0.73	.....	Low in solids.
8659	W. H. Peters, Madison.	88.7	0.59	.....	Below standard.
8708	C. F. Harper & Co., Madison.	54.8	0.70	.....	Below standard.
8429	J. J. Brink & Son, Ft. Wayne.	44.0	0.94	.....	Below standard.
8449	D. & H. Rosenbaum, Mt. Vernon.	51.2	1.22	.....	Coal tar dye present.
8453	W. H. Fogas, Mt. Vernon.	83.1	0.92	.....	Coal tar dye present.
8455	Charles Dawson, Mt. Vernon.	85.5	0.25	.....	Coal tar dye present.
8330	Nye & Booe, Crawfordsville.	.....	0.75	.....	Below standard.
8315	Moore & Miller, Vincennes.	83.5	3.44	.....	Poor quality.
8313	C. S. Miller, Vincennes.	57.4	1.46	.....	Poor quality.
8293	S. H. Ross, Shoals.	89.8	0.93	.....	Low in solids.
8050	Sheridan's Pharmacy, Evansville.	85.6	0.91	.....	Coal tar dye present.
8088	Theodore Gerke, Evansville.	85.6	0.71	.....	Coal tar dye present.
7883	J. C. Vermilyan, Bloomington.	89.7	0.53	.....	Low in extracts.
7754	....., Evansville.	81.8	0.70	.....	Coal tar dye present
7722	Schlaepfer's Pharmacy, Evansville.	84.5	1.31	.....	Coal tar dye present.
7703	E. W. Stanffer, Hammond.	66.8	1.08	.....	Low in alcohol.

TINCTURE GINGER. (TINCTURA ZINGIBER.)

Of the eighteen samples analyzed, 7 were pure and 11 were below standard. Tr. of Ginger should contain at least 90 per cent. of alcohol and, if prepared according to the pharmacopoeia from good ginger, should contain 1 per cent. or more of extract. Six samples of Essence of Jamaica Ginger analyzed were all of fair quality. Two samples contained somewhat less than the required amount of solids.

TINCTURE OF GINGER—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Residue Per 100 C. C.
7053	A. G. Baldwin, Noblesville.....	87.7	1.22
9648	S. O. McKennan, Connersville.....	83.5	1.24
9652	L. Ashworth, Connersville.....	84.0	1.09
9897	Daniel Stewart Drug Co., Indianapolis.....	88.2	1.22
7365	J. H. Conner & Co., New Albany.....	89.4	1.28
7370	McDonald, Stockdell Co., New Albany.....	91.9	1.16
7723	Schlaepfer's Pharmacy, Evansville.....	87.8	1.01

TINCTURE OF GINGER—BELOW STANDARD.

7020	F. N. Voght, Indianapolis.....	86.7	0.63
7084	James R. Cole, Indianapolis.....	80.5	0.82
7086	Waddell & Walterhouse, Indianapolis.....	90.0	0.74
7225	Sloan Drug Co., French Lick.....	90.7	0.64
7568	Cox Pharmacy, Seymour.....	89.4	0.43
7527	Mary Kennedy, Lawrenceburg.....	91.5	0.43
9364	Denberger Drug Co., Boonville.....	58.5	4.43
9608	Ed. E. Jenkins, Shelbyville.....	89.6	0.89
8889	R. C. Wood & Son., Franklin.....	39.8	0.97
7569	Coe Pharmacy Co., Seymour.....	91.9	0.34
9593	Schroeder & Hoops, Shelbyville.....	82.4	0.68

TINCTURE OF IODINE. (TINCTURA IODI.)

Of 148 samples of Tr. of Iodine analyzed during the year, 88 were below standard, while 60 were pure. This is equivalent to a percentage of adulteration of 59.4 per cent. The explanation for this large percentage of adulteration is doubtless due to the fact that druggists are not sufficiently careful in following the U. S. P. method of preparation. Frequently shelf bottles are found which contain crystals of undissolved iodine. In such cases the tincture is usually found to be deficient in strength. There is no reason why a satisfactory Tr. of Iodine cannot be properly made if directions are followed. Two samples of Tr. of Iodine analyzed were 215.4 per cent. and 212.1 per cent., and were evidently made after old formulas. These tinctures have been classed as illegal. The use of tincture of this excessive strength would be attended with disastrous consequences to the patient, and the sale of goods far above standard should be discountenanced.

TINCTURE OF IODINE—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.
6990	Navin's Pharmacy, Indianapolis	106.4
6991	Empire Drug Store, Indianapolis	100.9
7027	Haag's Pharmacy, Indianapolis	121.8
7030	E. W. Thompkins, Indianapolis	103.1
7037	Rhodes' Pharmacy, Indianapolis	108.2
7040	Bowens, Indianapolis	104.2
7082	Henry E. Zimmer, Indianapolis	102.3
7222	West Baden Springs Drug Co., West Baden	99.6
7228	French Lick Drug Co., French Lick	99.6
7246	W. H. Burget, Indianapolis	113.2
7306	J. S. Adams, Richmond	100.5
7310	T. F. McDonnell, Richmond	104.2
7372	C. E. Crecelins, New Albany	99.4
7375	C. D. Knofel, New Albany	117.0
7438	Wm. Rudder & Co., Salem	104.2
7704	E. R. Stauffer, Hammond	113.0
7745	J. F. Bomm Drug Co., Evansville	110.8
7755	Henry Tepe, Evansville	100.9
7851	A. G. Schluer, East Chicago	109.7
7878	Jno. W. O'Harrow, Bloomington	110.8
7882	J. C. Vermilion, Bloomington	104.5
7954	E. Bon Merritt, Frankfort	104.5
8146	H. E. Zimmer, Indianapolis	100.9
8155	Hoskins & Miller, Indianapolis	104.5
8202	C. L. Zimmermann, Indianapolis	103.1
8204	Wm. F. Werner, Indianapolis	105.6
8205	L. W. Holmes & Co., Indianapolis	102.0
8228	Coonley Drug Co., South Bend	102.7
8250	Lafayette Pharmaceutical Co., Lafayette	117.7
8262	Bowles Bros., Bloomington	101.7
8264	Charles Plizer & Co., New York	100.3
8292	Sam H. Ross, Shoals	139.8
8312	Charles S. Miller, Vincennes	106.4
8314	Moore & Miller, Vincennes	107.8
8320	B. M. Keene, Indianapolis	136.1
8435	H. J. Bauer, Ft. Wayne	107.5
8437	Jordan & Scheriard, Ft. Wayne	114.1
8454	W. H. Fogas, Mt. Vernon	113.0
8739	Hugh Smith, Logansport	107.1
8821	Hauser & Parker, Columbus	104.5
8837	H. M. Holmes, Columbus	111.5
9185	W. H. Rogers, Madison	101.6
9240	Aug. Schreiber & Son, Tell City	100.0
9355	T. C. Basye, Rockport	102.7
9682	R. E. Clark, Wabash	114.6
9712	K. Bockman, Wabash	105.5
9734	Joe K. Smock & Son, Sullivan	100.5
9952	Tarleton & Tilford, Martinsville	114.4
9956	J. M. Carleton, Martinsville	101.6
9958	Roy Rigrish, Martinsville	112.6
9960	D. W. Rigrish, Martinsville	113.0
9993	The Peoples' Drug Store, Plymouth	100.5
10046	G. E. Calloway, Cambridge City	101.2
10090	O. Klepfer, Michigan City	105.6
10242	Rothinghouse Bros., Gas City	102.3

TINCTURE OF IODINE—BELOW STANDARD.

8626	B. J. Winger, Williamsport	80.3
8665	W. H. Rogers, Madison	88.5
8706	Gibson & Reidel, Madison	98.3
8714	J. L. Daggatt, North Vernon	95.7
8720	Troth Bros., Orleans	88.8
8826	T. J. Noblett, Columbus	74.4
8833	O. H. Mennet, Columbus	95.0
8883	C. H. Drybread, Franklin	92.4
7383	John Fell, Greentown	59.0
7400	Wm. Manning Drug Store, Greentown	63.1
8218	Frank Heegan, Indianapolis	66.4
8319	H. C. Raffensperger, Indianapolis	81.1
8354	C. E. Miller, Indianapolis	63.8
8355	George C. Morrison, Indianapolis	81.1
8391	W. C. Watjen, Vincennes	91.0
8502	Tritt's Drug Store, Logansport	71.1

TINCTURE OF IODINE—BELOW STANDARD—Continued.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.
8835	Ernest Stahlhuth, Columbus.	95.7
9063	L. F. Hunemeir, Washington.	88.8
9066	W. L. Jackson, Washington.	80.7
9080	A. F. Schmidt, Washington.	73.3
9092	G. W. Walker, Loogootee.	85.5
9166	Brewster & Thomas.	81.8
9217	C. W. Taulman, Corydon.	90.2
9222	L. A. Riley & Son., Corydon.	77.0
9234	E. R. Brundick, Huntingburg.	91.7
9343	H. A. Clark, Cannelton.	69.3
9357	A. D. Garlinghouse, Rockport.	81.1
9590	O. L. Bishop, Shelbyville.	85.3
9600	Robert W. Buxton, Shelbyville.	97.9
9602	Stanley Jones, Shelbyville.	72.0
9604	Richard M. Floyd, Shelbyville.	70.2
9607	Ed. E. Jenkins, Shelbyville.	92.9
9638	L. E. Green, Connersville.	60.1
9641	O. Elliott, Connersville.	86.2
9679	Franklin.	92.4
9703	E. Gackenheimer, Wabash.	96.8
9715	Bradley Bros., Wabash.	90.8
9954	Edgar Tarleton, Martinsville.	74.1
10001	Shadel's Drug Store, Plymouth.	78.8
10003	J. W. Rinard, Plymouth.	97.9
10012	Beam & Lynn, New Castle.	69.7
10072	Woodson & Willits, Michigan City.	92.8
10093	E. W. Lindemann, Michigan City.	92.8
10121	J. H. Clark & Son, Princeton.	65.3
10123	F. J. Biggs, Princeton.	99.4
10125	H. G. May, Princeton.	99.1
10142	Ed. Shoptaugh, Princeton.	92.8
10146	Joseph F. Schafer, Poseyville.	68.9
10277	Howard Bros., Summitville.	83.6
10305	Miller & Keith, Rochester.	88.8
10313	Alex. Ruh, Rochester.	84.4
10329	Charles Majors, Dugger.	81.1
9353	J. A. Sargent, Rockport.	215.4
9830	Hardy Burns, Newport.	212.1
10403	Jno. B. Burrell, Brownstown.	64.5
10509	Taylor & Roth, Edinburg.	86.6
10410	Samuel M. Smith, Osgood.	80.3
10406	O. R. Emerson, Brownstown.	88.4
10404	Charles E. Greger, Brownstown.	80.3
10307	George V. Davis, Rochester.	91.7
10239	I. L. Klingensmith, Gas City.	78.5
6987	Charles W. Eichrodt, Indianapolis.	60.1
7035	Huders Drug Store, Indianapolis.	78.8
7051	W. E. Axline, Noblesville.	64.5
7088	Robert Navin, Indianapolis.	76.6
7233	Julius Hoag, Indianapolis.	95.4
7240	Francis Pharmacy, Indianapolis.	74.8
7252	H. O. Atchinson, Indianapolis.	82.5
7462	J. A. Graham, Jeffersonville.	55.7
7464	Floyd Parks, Jeffersonville.	81.1
7510	Stevens & Nichols, Muncie.	81.4
7604	Freel & Mason, Marion.	95.7
7613	R. L. Lander, Marion.	98.3
7678	Otto Negele, Hammond.	88.0
7701	A. E. Kepert, Hammond.	85.1
7733	Gottman Drug Co., Evansville.	51.3
7880	Bowles Bros., Bloomington.	59.0
7888	C. O. Maple, Bloomington.	98.7
7890	Thomas J. Penrod, Bloomington.	74.8
7942	Lafayette Pharmacal Co., Lafayette.	71.9
8048	S. B. Muller, Evansville.	88.0
8059	L. Wolfgang, Evansville.	74.8
8062	Wm. Fritsch, Evansville.	83.3
8090	Leon Curry, Evansville.	95.4
8151	H. J. Huder, Indianapolis.	96.8
8173	J. T. Fogas, Indianapolis.	91.3
8197	J. D. Pierson, Indianapolis.	85.5
8210	Cox Pharmacy, Indianapolis.	89.5
8211	M. Schwartz, Indianapolis.	93.5
8217	J. M. Scott & Son, Indianapolis.	94.3
8219	S. Muhl Drug Co., Indianapolis.	99.4
8422	C. B. Woodworth, Ft. Wayne.	66.0
8504	John F. Coulson, Logansport.	70.4
7133	Verl K. Osborn, Plainfield.	16.8

TINCTURE OF IRON. (TINCTURI FERRI CHLORIDI.)

Of the 68 samples of Tr. of Iron analyzed, 35 were pure and 33 adulterated, which is an equivalent to a percentage of adulteration of 48.5 per cent., a decided improvement over the results obtained last year. Tr. of Iron is reported as illegal when the amount of iron is less than that required by the pharmacopoeia.

TINCTURE OF IRON—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.	Iron.	Alcohol by Volume.
8137	Clyde O. Laughner, Whitestown.	109.2	5.00	.....
8148	H. E. Zimmer, Indianapolis.	101.6	4.65	58.1
8149	H. J. Huder, Indianapolis.	107.1	4.90	55.6
8157	B. T. Fisher, Indianapolis.	120.7	5.52	64.0
8230	Coonley Drug Co., South Bend.	115.5	.....	.....
8231	Charles Coonley, South Bend.	114.7	.....	.....
8274	Fred R. Widner, Dayton.	101.0	4.62	.....
8279	Morgan & Dick, Crawfordsville.	106.0	4.85	.....
8281	George D. Cook, Crawfordsville.	104.9	4.80	.....
8392	W. C. Watjen, Vincennes.	100.5	4.60	59.5
8423	Myers Bros., Ft. Wayne.	126.2	5.77	53.6
8436	H. J. Bauer, Ft. Wayne.	100.5	4.60	49.8
8503	W. H. Porter, Logansport.	104.9	4.80	48.5
8616	Deidrich H. Wallace, Veedersburg.	100.5	4.60	.....
8542	C. F. Robinson & Son, Attica.	100.5	4.60	.....
8591	M. M. Murphy, Delphi.	107.1	4.90	.....
8661	Jas. Hargan, Jr., Madison.	100.0	4.57	63.5
6989	E. H. Wilson, Indianapolis.	103.8	.....	.....
7010	J. C. Clark, Indianapolis.	108.2	.....	.....
7041	Bowens, Indianapolis.	108.9	.....	.....
7048	C. L. Mitchell, Noblesville.	101.5	.....	.....
7364	J. H. Conner & Co., New Albany.	101.5	.....	.....
7384	Daniel Moroney, Indianapolis.	104.2	.....	.....
7387	Fisher's Pharmacy, Indianapolis.	134.2	.....	.....
7402	Jerome J. Keene, Indianapolis.	104.8	.....	.....
7459	Schwanninger Bros., Jeffersonville.	103.0	.....	.....
7659	....., Indianapolis.	103.8	.....	.....
9033	George S. Ellis, Terre Haute.	102.6	4.7	48.7
9687	E. W. Swadley, Wabash.	108.1	4.95	56.6
9728	Charles Parish, Farmersburg.	134.2	6.15	59.2
9752	J. R. Miller, Roachdale.	120.7	5.52	47.0

TINCTURE OF IRON—ILLEGAL.

7131	Green & Watson, Plainfield.	91.7	4.20	.....
7187	Herbert L. Wilson, Danville.	99.3	4.55	33.3
7221	Sherrod & Ludley, West Baden.	79.6	3.65	66.8
7389	Charles Hoch, Indianapolis.	66.6	3.05	63.0
7391	Baird's Pharmacy, Indianapolis.	82.9	3.80	27.9
7562	W. R. Ramsey, Mulberry.	72.6	3.32	.....
7630	C. L. Thompson, Danville.	74.3	3.40	.....
7632	J. W. Hoover, Jeffersonville.	66.6	3.05	76.6
7736	John Laval & Sons, Evansville.	69.9	3.20	73.5
7929	....., Evansville.	97.8	4.47	55.2
7938	Brown Drug Company, Lafayette.	90.1	4.12	69.2
7951	Hogan Drug Company, Lafayette.	46.4	2.12	.....
8236	M. F. Campbell & Co., Lebanon.	55.1	2.52	.....
8237	Long, Etter & Co., Lebanon.	92.8	4.25	.....
8246	Searcy & Hodge, Kirklint.	93.4	4.21	.....
8413	Noah W. Myer, Crawfordsville.	77.0	3.52	.....
8427	J. J. Brink & Son, Ft. Wayne.	75.9	3.47	63.6
8524	Frank S. Vawter, Tipton.	50.2	2.30	.....
8529	Henry Mehleg, Tipton.	77.6	3.72	.....
8583	W. S. Margowski, Delphi.	66.1	3.02	.....
8585	Lytle & Orr Co., Delphi.	98.3	4.50	.....
8907	....., Delphi.	96.7	4.42	.....
8619	Hardy Sanger, Veedersburg.	67.2	3.07	.....
9015	R. E. Eveleigh, Bloomfield.	91.7	4.2	35.4
9016	Bynum Bros., Boonville.	92.2	4.22	61.8

TINCTURE OF IRON—ILLEGAL—Continued.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.	Iron.	Alcohol by Volume.
9017	Sbertzer Bros., Bloomfield.....	78.6	3.6	68.4
9294	Wm. J. Hamilton, Linton.....	85.7	3.92	64.4
9297	E. T. Sherwood, Linton.....	81.8	3.75	62.5
9300	John W. Ikerd, Switz City.....	92.9	4.22	54.3
9302	Charles C. Williams, Jasonville.....	76.4	3.5	64.0
9681	R. E. Clark, Wabash.....	97.2	4.45	66.4
9696	E. Gackenheimer, Wabash.....	95.6	4.37	56.6
9750	R. E. Eveleigh, Bloomfield.....	96.0	4.40	34.1
9824	N. M. Mendenhall, Brazil.....	71.5	3.27	66.4
9837	M. C. Van Dorn, Covington.....	84.7	3.87	37.7
9718	Bradley Bros., Wabash.....	94.5	4.32	65.7
9829	E. R. Stephens, Newport.....	97.8	4.47	68.4

BAY RUM.

The eight samples analyzed were found to be pure. The use of methyl alcohol in preparing this article has evidently been abandoned.

BAY RUM—LEGAL.

Lab. No.	Retailer.	Specific Gravity 20°C.	Ethyl Alc. by Vol. 20°C.
9065	W. L. Jackson, Washington.....	.9425	42.5
9076	H. J. Linderman, Washington.....	.9353	47.0
9077	J. N. Jones, Washington.....	.9398	44.6
9089	B. Seal & Co., Loogootee.....	.9343	47.6
9091	G. A. Walker, Loogootee.....	.9218	53.8
9093	Smith's Pharmacy, Loogootee.....	.9530	36.5
7213	Duckworth Pharmacy, Indianapolis.....		44.35
7620	Hildebrand & Ansley, Marion.....		41.24

BLACK ANTIMONY.

Five samples of Black Antimony were analyzed and all found to be adulterated, being nothing but powdered charcoal. Black antimony, which is a preparation used by veterinarians, is rarely ever found on the market in a pure state. At the present time the wholesale trade has discontinued the use of this term and is now selling its preparation of charcoal as "Horse Medley." An article so named is quite as valuable for medicinal purposes as when sold under the name of a drug which does not enter into its composition.

BLACK ANTIMONY—ILLEGAL.

Lab. No.	Retailer.	Per Cent. Residue Insol. in HCL.	Remarks.
8140	Knox & Company, Zionsville.....	94.7	Almost entirely charcoal.
8247	S. L. Kutz & Son, Kirklint.....	96.0	Almost entirely charcoal.
7941	E. M. Schnaible, LaFayette.....	94.13	Adulterated. Charcoal and iron salts.
7952	Hogan Drug Co., LaFayette.....	24.45	Adulterated. Charcoal and calcium.
7979	Fred Combs, Lebanon.....	55.68	Adulterated. Charcoal and calcium.

AQUA AMMONIA.

Of the 12 samples analyzed, nine were below strength. Aqua Ammonia loses strength rapidly when placed in an ordinary loose stoppered shelf bottle. The druggists should use precaution to keep such volatile drugs in carefully closed containers.

AQUA AMMONIA—LEGAL.

Lab. No.	Retailer.	U. S. P. Strength.	NH ₃ .	Specific Gravity @ 25°C.
10025	L. E. Kinsey & Co., New Castle.....	118.2	11.82	.9486
10043	F. E. Wills, Cambridge City.....	116.1	11.61	.9495
10358	D. P. Campbell & Bro., Muncie.....	118.0	11.80	.9495

AQUA AMMONIA—ILLEGAL.

9867	A. C. Pilkenton, Greenfield.....	48.8	4.88	.977
9873	M. C. Quigley, Greenfield.....	55.7	5.57	.973
10007	William Pence, New Castle.....	88.8	8.85	.9598
10049	Dr. Johnson, Cambridge City.....	59.1	5.91	.9718
10500	Ernst Stahlhuth, Columbus.....	80.6	8.03	.9635
10258	Fred Drake, Van Buren.....	72.8	7.28	.9667
10264	W. G. Sims, Swayzee.....	85.8	8.58	.9612
10499	T. J. Noblett, Columbus.....	57.4	5.74	.9728
9921	J. T. Butler, Knightstown.....	72.2	7.22	.9668

QUININE. (QUININAE SULPHAS.)

Seven samples of Quinine were analyzed and all found to be pure.

QUININE—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
9885	W. S. Early, Greenfield.	10005	William M. Pence, New Castle.
9862	A. C. Pilkenton, Greenfield.	10017	G. F. Mowrer, New Castle.
9884	W. S. Pugh, Greenfield.	10022	L. E. Kinsey, New Castle.
9912	N. Reeves, Knightstown.		

CASTOR OIL.

The ten samples of castor oil analyzed all proved to be pure.

CASTOR OIL—LEGAL.

Lab. No.	Retailer.	Specific Gravity @ 25°C.	Butyro @ 20°C.	Polarization @ 20°C.
9882	W. S. Pugh, Greenfield.....	.9570	79.8	12.6
9892	V. L. Early, Greenfield.....	.9570	80.4	12.7
9907	A. C. Fouche, Knightstown.....	.9580	80.3	12.6
9915	N. Reeves, Knightstown.....	.9575	80.5	12.7
9922	J. T. Butler, Knightstown.....	.9570	80.3	12.5
10008	William Pence, New Castle.....	.9565	80.9	12.6
10027	L. E. Kinsey & Co., New Castle.....	.9570	80.4	12.6
10034	Ed. Smith, New Castle.....	.9565	80.5	12.6
10247	W. B. Teeter, Upland.....	.9575	80.0	12.7
10274	P. R. McLeod, Summitville.....	.9570	80.3	12.9

BEESWAX.

Seven beeswax samples were analyzed. Of these six were pure and one was adulterated, being almost half paraffin.

BEESWAX LEGAL.

Lab. No.	Retailer.	Butyro Reading @ 65°C.	Melting Point Degree C.	Per Cent. of Beeswax.
7797	Vickery Bros., Evansville.....	32.0	.....	.....
9863	A. C. Pilkenton, Greenfield.....	32.1	62.5	100
9875	M. C. Quigley, Greenfield.....	29.7	63.5	100
9886	V. L. Early, Greenfield.....	31.2	62.5	100
10010	Beam & Lynn, New Castle.....	29.9	63.0	100
10018	C. F. Mowrer, New Castle.....	29.5	63.0	100

BEESWAX—ILLEGAL.

*7616	Hildebrand & Ansley, Marion.....	23.254
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*Contained 46% paraffin.

MISCELLANEOUS DRUGS.

Many samples of chemicals usually carried in stock by druggists, have been analyzed and have been found to be free from adulteration. The chemicals supplied the drug trade are of good grade. The druggists' shelf bottles frequently contain chemicals which, because of their age, are unsatisfactory, but in other respects there is little evidence of adulteration.

RESULT OF ANALYSES OF DRUG SAMPLES.

Articles Examined.	Good.	Bad.	Total.	Per Cent. Adulterated.
Alcohol.....	4	1	5	20.0
Ammonia.....	3	9	12	75.0
Bay Rum.....	8	0	8	0.0
Beeswax.....	6	1	7	14.3
Black Antimony.....	0	5	5	100.0
Borax.....	2	0	2	0.0
Castor Oil.....	10	0	10	0.0
Glycerine.....	2	6	8	75.0
Lime Water.....	29	38	67	56.7
Paregoric.....	4	0	4	0.0
Spirits of Camphor.....	15	50	65	76.9
Tincture of Arnica.....	17	0	17	0.0
Tincture of Capsicum.....	43	53	96	55.2
Tincture of Ginger.....	12	7	19	36.0
Tincture of Iodine.....	60	88	148	59.4
Tincture of Iron.....	35	33	68	48.5
Witch Hazel.....	6	1	7	14.3
Quinine.....	7	0	7	0.0
Miscellaneous drug samples.....	33	10	43	23.0
Total.....	296	302	598	50.9

PROSECUTIONS.

It is not possible to judge of the efficacy of the Pure Food Law by referring to the list of convictions or estimating the fines assessed, nor is it advisable to employ such a method of arriving at the value of the law. Prosecutions are brought as a last resort. When all other methods of securing compliance are ineffectual it is then necessary to make use of that section of the law which provides for punishment of offenders. Since the passage of the law 223 cases have been brought against manufacturers or dealers who have violated some provision of the Food and Drug Law. Thirty-three of the defendants were acquitted by the court either because the evidence submitted by the State was insufficient, or there seemed some good reason for dismissing the case. The fines assessed amount to \$3,807.80.

The following table summarizes the reason upon which prosecutions were brought and shows the number of cases won and dismissed in each class:

PROSECUTIONS.

Article.	Total Number of Cases Brought.	Number of Cases Won.	Number of Cases Dismissed
Butter.....	26	20	6
Camphor.....	2	2	0
Cream of Tartar.....	1	1	0
Extracts.....	1	1	0
Foods exposed.....	4	4	0
Ice Cream.....	9	8	1
Lard.....	63	59	4
Lime Water.....	4	2	2
Maple Sugar and Syrups.....	7	1	6
Meats.....	22	18	4
Milk.....	47	41	6
Orange Cider, Orangeade.....	8	8	0
Sodas.....	1	1	0
Spices.....	3	1	2
Tinctures.....	3	3	0
Vinegars.....	10	8	2
Unsanitary conditions.....	14	14	0
Total.....	223	190	33

LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31.

County.	Lab. No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Allen.....	8681	G. R. Walters, Ft. Wayne.	Pork sausage	7-11-07	7-26-07	.....	Settled, \$1 and costs.
Allen.....	8867	Cut Rate Meat Market, Ft. Wayne.	Pork sausage	7-11-07	7-25-07	.....	Settled, \$1 and costs.
Allen.....	8876	J. H. Eaken, Ft. Wayne.	Vinegar	7-11-07	7-25-07	.....	Settled, \$10 and costs.
Bartholomew.....	8813	Rudolph Schniers, Columbus.	Milk	8-3-07	8-6-07	.....	Settled, \$10 and costs.
Carroll.....	8589	Lew Wallis, Delphi.	Lard	6-19-07	8-23-07	.....	Settled, \$10 and costs.
Carroll*.....	8704	J. E. Nance, Delphi.	Meat	9-13-07	9-13-07	.....	Settled, \$10 and costs.
Cass.....	8632	M. McCaffery & Co., Logansport.	Milk	6-26-07	8-8-07	.....	Settled, \$10 and costs.
Cass.....	8733	G. W. Timberlake, Logansport.	Milk	6-26-07	8-6-07	.....	Settled, \$10 and costs.
Cass.....	8743	Z. Sewing, Logansport.	Milk	6-26-07	8-3-07	.....	Settled, \$10 and costs.
Cass.....	8744	C. J. Seybold, Logansport.	Milk	6-26-07	8-3-07	.....	Settled, \$10 and costs.
Cass.....	8743	F. W. Klein, Logansport.	Milk	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Cass.....	8492	Elpers & Miller, Logansport.	Lard	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Cass.....	8495	Robert McCains, Logansport.	Lard	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Cass.....	8737	D. W. Powlen, Logansport.	Lard	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Cass.....	8481	Henry F. Drompp, Logansport.	Lard	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Cass.....	8483	John Rabung, Logansport.	Lard	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Cass.....	8489	J. H. Foley & Co., Logansport.	Lard	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Cass.....	8505	Homer Closson, Logansport.	Lard	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Clark.....	7642	W. K. Cooper, Jeffersonville.	Tincture of iodine	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Clark.....	7637	John Stelmair, Jeffersonville.	Milk	0-4-07	6-20-07	.....	Settled, \$10 and costs.
Clark.....	7652	Charles Hampel, Jeffersonville.	Milk	6-4-07	6-21-07	.....	Settled, \$10 and costs.
Clark.....	9828	Anderson Bros., Brazil.	Frankfurters	6-4-07	6-15-07	.....	Settled, \$10 and costs.
Clay.....	.....	Disher Restaurant, Brazil.	Milk	9-4-07	9-4-07	.....	Settled, \$10 and costs.
Clay.....	.....	J. W. Yocum, Brazil.	Butter	8-28-07	8-28-07	.....	Settled, \$10 and costs.
Clinton.....	8385	Lichtner & Bryan, Mulberry	Ice Cream	8-28-07	8-28-07	.....	Settled, \$10 and costs.
Clinton.....	.....	Frank A. Aughe, Frankfort.	Lard	8-3-07	9-27-07	.....	Settled, \$10 and costs.
Clinton.....	.....	W. H. Messler, Frankfort.	Dirty milk	10-3-07	10-14-07	.....	Settled, \$10 and costs.
Clinton.....	8243	Geo. Case, New Albany.	Dirty milk	10-3-07	10-15-07	.....	Settled, \$10 and costs.
Clinton.....	9977	Frank E. Jollisaint, New Albany	Lard	5-30-07	10-6-07	.....	Settled, \$10 and costs.
Floyd.....	8475	John A. Weaver, New Albany	Milk	10-1-07	10-7-07	.....	Settled, \$10 and costs.
Floyd.....	8472	J. W. Tipton, New Albany	Milk	6-26-07	7-31-07	.....	Settled, \$10 and costs.
Floyd.....	7428	John S. Payne, New Albany	Milk	4-22-07	5-3-07	.....	Settled, \$10 and costs.
Floyd.....	7432	John A. Weaver, New Albany	Milk	4-23-07	5-3-07	.....	Settled, \$10 and costs.
Floyd.....	9133	Paul Argo, New Albany	Milk	8-1-07	8-26-07	.....	Settled, \$10 and costs.
Floyd.....	9366	F. E. Jollisaint, New Albany	Milk	8-27-07	9-16-07	.....	Settled, \$10 and costs.
Floyd.....	9371	Kate Dean, New Albany	Milk	8-27-07	9-16-07	.....	Settled, \$10 and costs.
Floyd.....	9393	.....	Lard	8-30-07	9-16-07	.....	Settled, \$10 and costs.

LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31—Continued.

County.	Lab. No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Floyd.....	9395	John Stull, New Albany.....	Cider vinegar.....	9-16-07	9-17-07	.....	Settled, \$10 and costs.
Floyd.....	9396	John Stull, New Albany.....	Lard.....	9-16-07	9-17-07	.....	Settled, \$10 and costs.
Floyd.....	9397	Benj. Jackson, New Albany.....	Cider vinegar.....	9-16-07	9-17-07	Appeal taken.....	Settled, \$10 and costs.
Floyd.....	9398	Benj. Jackson, New Albany.....	Lard.....	9-16-07	9-17-07	Appeal taken.....	Settled, \$10 and costs.
Floyd.....	9402	Wm. Stonecipher, New Albany.....	Cider vinegar.....	9-16-07	9-17-07	.....	Settled, \$10 and costs.
Fountain.....	8544	Fred Springman, Attica.....	Lard.....	8-21-07	9-9-07	.....	Settled, \$10 and costs.
Fountain.....	8543	Dan'l V. Smith & Co., Attica.....	Lard.....	8-21-07	9-9-07	.....	Settled, \$10 and costs.
Fountain.....	8610	Merryman Bros., Covington.....	Lard.....	8-21-07	9-10-07	.....	Settled, \$10 and costs.
Fountain.....	.....	Frank Coleman, Covington.....	Orangeade.....	9-19-07	9-19-07	.....	Settled, \$10 and costs.
Fountain.....	8601	Frank Coleman, Covington.....	Exposed food.....	9-19-07	9-19-07	.....	Settled, \$10 and costs.
Fountain.....	8604	Zimmerman & Son, Covington.....	Lard.....	8-21-07	8-31-07	.....	Settled, \$10 and costs.
Fountain.....	8549	Geo. Feuerstein, Covington.....	Lard.....	8-21-07	8-26-07	.....	Settled, \$10 and costs.
Fountain.....	8545	Ed. Foster, Attica.....	Lard.....	6-24-07	6-24-07	.....	Settled, \$10 and costs.
Fountain.....	8803	Ost. A. Davis, Covington.....	Lard.....	6-24-07	6-24-07	.....	Settled, \$10 and costs.
Fountain.....	8805	Wm. Dennis, Covington.....	Lard.....	6-25-07	6-25-07	.....	Settled, \$10 and costs.
Fountain.....	8804	W. S. Bannan, Veedersburg.....	Lard.....	6-25-07	6-25-07	.....	Settled, \$10 and costs.
Grant.....	7600	A. J. Street, Marion.....	Lard.....	6-26-07	6-26-07	.....	Settled, \$10 and costs.
Grant.....	7605	Freel & Mason, Marion.....	Hamburger steak.....	6-5-07	6-28-07	.....	Settled, \$10 and costs.
Grant.....	7603	Levey Bros., Marion.....	Lime water.....	6-5-07	6-28-07	Appealed.....	Settled, \$10 and costs.
Grant.....	7597	Cold Storage Ice Cream Co., Marion.....	Lard.....	6-5-07	6-28-07	Not guilty.....	Settled, \$10 and costs.
Grant.....	7611	C. H. Overman, Marion.....	Ice cream.....	6-5-07	6-28-07	Not guilty.....	Settled, \$10 and costs.
Grant.....	7598	George Keifer, Marion.....	Lime water.....	6-5-07	6-28-07	.....	Settled, \$10 and costs.
Grant.....	8358	Chris. C. Gordon, Marion.....	Milk.....	6-5-07	6-28-07	.....	Settled, \$10 and costs.
Grant.....	8372	Jake Middleton, Marion.....	Sausage.....	6-21-07	6-28-07	Not guilty.....	Settled, \$10 and costs.
Grant.....	8374	George A. Phillips, Marion.....	Milk.....	6-21-07	6-28-07	Not guilty.....	Settled, \$10 and costs.
Grant.....	8370	Dick's Restaurant and Bakery, Marion.....	Milk.....	6-21-07	6-28-07	Not guilty.....	Settled, \$10 and costs.
Greene.....	9309	J. F. King, Jasonville.....	Milk.....	8-2-07	8-2-07	.....	Settled, \$10 and costs.
Greene.....	9311	E. S. Benjamin, Linton.....	Orange cider.....	8-2-07	8-2-07	.....	Settled, \$10 and costs.
Greene.....	9301	Wm. Ritter, Bloomfield.....	Lard.....	6-30-07	7-31-07	.....	Settled, \$10 and costs.
Greene.....	7133	Verl K. Osborn, Plainfield.....	Dirty milk.....	10-23-07	10-23-07	.....	Settled, \$10 and costs.
Greene.....	7180	Edward D. Crowley, Danville.....	Iodine.....	6-4-07	6-18-07	.....	Settled, \$10 and costs.
Henry.....	7345	Mansfield & Shields, New Castle.....	Milk.....	4-8-07	6-12-07	.....	Settled, \$10 and costs.
Howard.....	7350	Williams Bros., Kokomo.....	Meat.....	10-17-07	10-17-07	.....	Settled, \$10 and costs.
Howard.....	7350	W. J. Webb., Kokomo.....	Cider vinegar.....	4-22-07	4-22-07	.....	Settled, \$10 and costs.
Howard.....	7142	Union Dairy Company, Kokomo.....	Milk.....	4-22-07	4-6-07	.....	Settled, \$10 and costs.

Jackson.....	7562	Louis Heins, Seymour.....	Hamburger steak.....	5- 3-07	5- 4-07	Settled, \$10 and costs.
Jackson.....		Alex. Lee, Seymour.....	Unsatisfactory conditions.....	9-25-07	9-25-07	Settled, \$10 and costs.
Jefferson.....	8649	James Russell, Seymour.....	Unsatisfactory conditions.....	9-25-07	9-25-07	Settled, \$10 and costs.
Jefferson.....	8655	Albert Ruediger, Madison.....	Milk.....	7-13-07	7-13-07	Settled, \$10 and costs.
Jefferson.....	8656	Stephen F. McKay, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Jefferson.....	8657	Ed. W. Spangler, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Johnson.....	8879	Henry Eckert, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Lake.....		Caleb M. Eaton, Franklin.....	Cider vinegar.....	8- 3-07	9-16-07	Settled, \$10 and costs.
Lake.....		M. W. Lutz, Hammond.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		T. B. Roper, Hobart.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		W. Dobbins, Hammond.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		Sam Gobitz, Hammond.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Madison.....	8022	E. J. Nicholson, Ross Station.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Madison.....	8175	Daniel Kurtz, Alexandria.....	Lard.....	6- 4-07	6-15-07	Settled, \$10 and costs.
Madison.....	7389	Fred Alderdorf, Elwood.....	Hamburger.....	6- 4-07	6-10-07	Settled, \$10 and costs.
Madison.....	8531	Wendner & Arend, Elwood.....	Lard.....	5-23-07	6-12-07	Settled, \$10 and costs.
Madison.....	8026	Bernard H. Keller, Elwood.....	Sausage.....	6-22-07	6-22-07	Settled, \$10 and costs.
Madison.....	7813	John P. Downs, Alexandria.....	Sausage.....	6- 1-07	8-31-07	Settled, \$10 and costs.
Madison.....	7832	Merchants Restaurant, Indianapolis.....	Butter.....	6- 1-07	8-31-07	Settled, \$10 and costs.
Madison.....	7839	Foster-Powder Restaurant, Indianapolis.....	Butter.....	6- 1-07	8- 1-07	Settled, \$10 and costs.
Madison.....	8194	Born's Restaurant, Indianapolis.....	Butter.....	6-12-07	8- 2-07	Settled, \$10 and costs.
Madison.....	7094	Mont. Williams, Indianapolis.....	Butter.....	6-12-07	8- 2-07	Settled, \$10 and costs.
Madison.....	7098	Wm. H. Elker, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Madison.....	7108	Chas. Railsback, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Madison.....	7003	Mary E. Doolittle, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Madison.....	6979	N. B. Groff, Indianapolis.....	Butter.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Madison.....	6995	Frank Gross, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Madison.....	6996	Chas. H. Rinne, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Madison.....	7254	Frank M. White, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Madison.....	7095	Daniel C. Buser, Indianapolis.....	Maple sugar.....	4-22-07	5-10-07	Settled, \$10 and costs.
Madison.....	7098	Eliz. M. Berry, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Madison.....	7248	Henry Click & David Shane, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Madison.....	7239	Wm. H. Burget, Indianapolis.....	Black pepper.....	4-22-07	5- 1-07	Settled, \$10 and costs.
Madison.....	7540	C. W. Verburg, Indianapolis.....	Po. cinnamon.....	4-22-07	5- 1-07	Settled, \$10 and costs.
Madison.....	7595	J. R. Ergenbright, Indianapolis.....	Lime water.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7589	F. P. Jaggers, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7422	Andrew Mass, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7423	Chas. H. Cook, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7592	Jno. Bremer, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7669	Schneider Sisters, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7594	Standard Grocery Co., Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7636	Fred Jaus, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7587	C. Zolbe, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Madison.....	7836	Chas. Morback, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Madison.....	8183	Miles Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Madison.....	7831	Horace Haynes, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Madison.....	7770	Little Denison, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Madison.....	8195	Bond's Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Madison.....		"Abe Martin," Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.

County.	Lab. No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Marion.....	8184	The Oak, Rhodes & Coen, Indianapolis.....	Butter.....	6-12-07	7- 9-07	.....	Settled, \$10 and costs.
Marion.....	8193	National Restaurant, Indianapolis.....	Butter.....	7- 3-07	7- 3-07	.....	Settled, \$10 and costs.
Marion.....	8190	Norman Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	.....	Settled, \$10 and costs.
Marion.....	7841	Edward H. Thayer, Indianapolis.....	Butter.....	6-12-07	7- 9-07	.....	Settled, \$10 and costs.
Marion.....	7837	Smith's Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	.....	Settled, \$10 and costs.
Marion.....	8191	Princeton Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7844	Ross's Cafe, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7834	Schiffman Coffee House, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7829	B. M. Covert, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	8192	Illinois Cafe, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7587	Charles Morbeck, Indianapolis.....	Lard.....	5-15-07	5-22-07	.....	Settled, \$10 and costs.
Marion.....	8254	Katherine Wallace, Indianapolis.....	Milk.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	8158	B. T. Fisher, Indianapolis.....	Lime water.....	6- 3-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Miami.....	7892	Frank Jackson, Peru.....	Unsanitary milk rooms	10-31-07	10-31-07	.....	Settled, \$10 and costs.
Monroe.....	7903	William Curry, Bloomington.....	Milk.....	6- 6-07	6- 6-07	.....	Settled, \$10 and costs.
Montgomery.....	8288	T. E. Weil & Co., Crawfordsville.....	Milk.....	6- 6-07	6- 6-07	.....	Settled, \$10 and costs.
Montgomery.....	8333	Phillip Fink & Son, Crawfordsville.....	Lard.....	8- 3-07	8-29-07	.....	Settled, \$10 and costs.
Montgomery.....	8285	Music Hall Pharmacy, Crawfordsville.....	Lard.....	8- 3-07	8-29-07	.....	Settled, \$10 and costs.
Montgomery.....	8282	Sinkey & Gilkey, Crawfordsville.....	Lard.....	8- 3-07	8-29-07	.....	Settled, \$10 and costs.
Montgomery.....	.....	Edgar W. Pease, Crawfordsville.....	Orangeade.....	8-29-07	8-29-07	.....	Settled, \$10 and costs.
Montgomery.....	8719	Thomas Darrah, Crawfordsville.....	Orangeade.....	8-29-07	8-29-07	.....	Settled, \$10 and costs.
Orange.....	8451	O. W. Stephenson, Orleans.....	Campbor.....	8- 3-07	8- 9-07	.....	Settled, \$10 and costs.
Posey.....	9764	Carl Statz, Mt. Vernon.....	Sausage.....	8-13-07	8-17-07	.....	Settled, \$10 and costs.
Putnam.....	7267	Jesse McAnally, Greencastle.....	Milk.....	8-23-07	8-24-07	.....	Settled, \$10 and costs.
Putnam.....	7264	O. L. Means, Shelbyville.....	Unsanitary conditions	8-21-07	8-21-07	Not guilty.	Settled, \$10 and costs.
Shelby.....	7258	S. C. Goff, Shelbyville.....	Alspice.....	4-22-07	5-17-07	Not guilty.	Settled, \$10 and costs.
Shelby.....	7255	Ernest James, Shelbyville.....	Vinegar.....	4-22-07	5-17-07	Not guilty.	Settled, \$10 and costs.
Shelby.....	7256	Howard Leap, Shelbyville.....	Milk.....	4-22-07	5-17-07	Not guilty.	Settled, \$10 and costs.
Shelby.....	7256	Lon Coulston, Shelbyville.....	Milk.....	4-22-07	5-17-07	Not guilty.	Settled, \$10 and costs.
Sullivan.....	9316	Wm. Johnson, Farmersburg.....	Unsanitary conditions	8-14-07	8-14-07	.....	Settled, \$38, 2 charges.
Sullivan.....	9317	Phillip Coyle, Farmersburg.....	Orangeade powder	8- 8-07	8- 8-07	.....	Settled, \$10 and costs.
Sullivan.....	9315	Jas. F. Yeager, Farmersburg.....	Orangeade powder	8- 8-07	8- 8-07	.....	Settled, \$10 and costs.
Sullivan.....	.....	A. F. Edwards, Farmersburg.....	Orangeade powder	8- 8-07	8- 8-07	.....	Settled, \$10 and costs.
Sullivan.....	.....	Wesley Barnard, Sullivan.....	Dirty milk.....	8-14-07	8-14-07	.....	Settled, \$10 and costs.
Sullivan.....	.....	W. R. Turman, Sullivan.....	Colored distilled vinegar.....	8-16-07	8-16-07	.....	Settled, \$10 and costs.

Sullivan.....	Geo. W. Leach, Sullivan.....	Unsanitary conditions.....	8-13-07	8-13-07	Settled, \$50.25; 3 charges.
Sullivan.....	Walter H. Leach, Sullivan.....	Colored distilled vinegar.....	8-14-07	8-14-07	Settled, \$10 and costs.
Sullivan.....	J. H. Learnard, Sullivan.....	Unsanitary conditions.....	8-13-07	8-13-07	Settled, \$10 and costs.
Sullivan.....	Fred Harding, Dugger.....	Orange cider.....	10-22-07	10-22-07	Settled, \$10 and costs.
Sullivan.....	H. E. Dutton, Sullivan.....	Maple syrup.....	8-14-07	10-22-07	Settled, \$10 and costs.
Sullivan.....	Reed & Batey, Sullivan.....	Spirits camphor.....	8-14-07	10-22-07	Settled, \$10 and costs.
Sullivan.....	Lawrence Nicely, Dayton.....	Cream tartar.....	6-7-07	10-5-07	Settled, \$10 and costs.
Tippecanoe.....	Dreyfus & Co., Lafayette.....	Lard.....	8-21-07	10-4-07	Settled, \$10 and costs.
Tippecanoe.....	Samuel N. Jackson, Lafayette.....	Milk.....	10-8-07	10-9-07	Settled, \$10 and costs.
Tippecanoe.....	Nicholas Gillian, Lafayette.....	Milk.....	10-1-07	10-2-07	Settled, \$10 and costs.
Tippecanoe.....	Nicholas S. Riefers, Lafayette.....	Dirty milk.....	10-10-07	10-10-07	Settled, \$10 and costs.
Tippecanoe.....	Joseph Van Dume, Lafayette.....	Dirty milk.....	10-10-07	10-10-07	Settled, \$10 and costs.
Tippecanoe.....	John Steiff, Lafayette.....	Milk.....	10-30-07	10-31-07	Settled, \$10 and costs.
Tippecanoe.....	James Lucas, W. Lafayette.....	Pastry exposed.....	10-2-07	10-2-07	Settled, \$10 and costs.
Tippecanoe.....	Nicholas Gillian, Lafayette.....	Meat.....	10-8-07	10-8-07	Settled, \$10 and costs.
Tippecanoe.....	Wm. E. Burkle, Lafayette.....	Extract raspberry.....	5-11-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	C. T. Hurley, Lafayette.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	Bunch & Bunch, Tipton.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	Moore & Surface, Tipton.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	Batchelor & May, Tipton.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	Batchelor & May, Tipton.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	C. B. Hobbs, Tipton.....	Lard.....	4-22-07	9-24-07	Settled, \$10 and costs.
Tippecanoe.....	The Deeler Co., Tipton.....	Vinegar.....	6-7-07	6-18-07	Settled, \$10 and costs.
Tippecanoe.....	Oscar Born, Evansville.....	Butter.....	6-7-07	6-18-07	Settled, \$10 and costs.
Tippecanoe.....	Ed. Waldsmith, Evansville.....	Hamburger.....	6-7-07	7-8-07	Settled, \$10 and costs.
Tippecanoe.....	Jacob Folz, Jr., Evansville.....	Hamburger.....	6-7-07	7-8-07	Settled, \$10 and costs.
Tippecanoe.....	Louis Schmadel, Evansville.....	Lard.....	6-7-07	7-8-07	Settled, \$10 and costs.
Tippecanoe.....	Samuel G. Newman, Evansville.....	Lard.....	6-7-07	7-8-07	Settled, \$10 and costs.
Tippecanoe.....	Vickery Bros., Evansville.....	Lard.....	5-12-07	5-22-07	Settled, \$10 and costs.
Tippecanoe.....	Nick Nauzopolis.....	Unsanitary conditions.....	6-7-07	7-8-07	Settled, \$10 and costs.
Tippecanoe.....	Gus Weil, Evansville.....	Sausage.....	6-7-07	9-9-07	Settled, \$10 and costs.
Tippecanoe.....	Oscar Chesterfield, Clinton.....	Orange cider.....	9-5-07	9-9-07	Settled, \$10 and costs.
Tippecanoe.....	Deis & Sluin, Clinton.....	Meat.....	8-21-07	8-27-07	Settled, \$10 and costs.
Tippecanoe.....	George Wood, Terre Haute.....	Lard.....	8-21-07	8-27-07	Settled, \$10 and costs.
Tippecanoe.....	C. O. Boyll, Terre Haute.....	Lard.....	8-21-07	8-27-07	Settled, \$10 and costs.
Tippecanoe.....	John F. Caine, Terre Haute.....	Lard.....	8-21-07	8-27-07	Settled, \$10 and costs.
Tippecanoe.....	C. W. Nagle, Terre Haute.....	Milk.....	7-13-07	7-13-07	Settled, \$52; 2 charges.
Tippecanoe.....	Boss Mace, Terre Haute.....	Lard.....	7-8-07	7-8-07	Settled, \$10 and costs.
Tippecanoe.....	George C. Roscher, Terre Haute.....	Lard.....	7-8-07	7-8-07	Settled, \$10 and costs.
Tippecanoe.....	Charles H. Ehrmann & Co., Terre Haute.....	Lard.....	7-3-07	7-3-07	Settled, \$10 and costs.
Tippecanoe.....	Freeman E. Jacques & Son, Terre Haute.....	Lard.....	7-2-07	7-2-07	Settled, \$10 and costs.
Tippecanoe.....	Fred Herman, Terre Haute.....	Lard.....	7-16-07	7-16-07	Settled, \$10 and costs.
Tippecanoe.....	Ed. A. Hollingsworth, Terre Haute.....	Lard.....	7-6-07	7-6-07	Settled, \$10 and costs.
Tippecanoe.....	James W. Rudolph, Terre Haute.....	Lard.....	7-6-07	7-6-07	Settled, \$10 and costs.
Tippecanoe.....	Charles A. Raebler, Terre Haute.....	Lard.....	7-5-07	7-5-07	Settled, \$10 and costs.
Tippecanoe.....	Patrick Sullivan, Terre Haute.....	Lard.....	7-5-07	7-5-07	Settled, \$10 and costs.
Tippecanoe.....	George Sheldel, Terre Haute.....	Lard.....	7-6-07	7-6-07	Settled, \$10 and costs.
Tippecanoe.....	Leonard Van Prooyen, Terre Haute.....	Lard.....	7-6-07	7-6-07	Settled, \$10 and costs.
Tippecanoe.....	Buntin Drug Co., Terre Haute.....	Ice cream.....	7-18-07	7-18-07	Settled, \$10 and costs.
Tippecanoe.....	Furnas Ice Cream Co., Terre Haute.....	Ice cream.....	7-10-07	7-10-07	Settled, \$10 and costs.

LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31—Continued.

County.	Lab. No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Vigo.....	8778	Greek Candy Kitchen, Terre Haute.....	Ice cream.....	7-16-07	7-16-07	.....	Settled, \$10 and costs.
Vigo.....	8785	Gust. Leekos, Terre Haute.....	Ice cream.....	7- 5-07	7- 5-07	.....	Settled, \$10 and costs.
Vigo.....	8984	Pear Ice Cream Co., Terre Haute.....	Ice cream.....	7-16-07	7-16-07	.....	Settled, \$10 and costs.
Vigo.....	8781	Vigo Commission Co., Terre Haute.....	Ice cream.....	7-17-07	7-17-07	.....	Settled, \$10 and costs.
Vigo.....	8779	Yeager & Rigney, Terre Haute.....	Ice cream.....	7-16-07	7-16-07	.....	Settled, \$10 and costs.
Vigo.....	8987	A. M. Baganz, Terre Haute.....	Sodas.....	7- 9-07	7- 9-07	.....	Settled, \$10 and costs.
Vigo.....	8761	Ehrmann & Co., Terre Haute.....	Link sausage.....	7- 3-07	7- 3-07	.....	Settled, \$10 and costs.
Vigo.....	8786	George Sheldel, Terre Haute.....	Sausage.....	7- 6-07	7- 6-07	.....	Settled, \$10 and costs.
Vigo.....	9011	Ross Mace, Terre Haute.....	Milk.....	7-13-07	7-13-07	.....	Settled, \$10 and costs.
Vigo.....	9024	W. L. McPerk, Terre Haute.....	Milk.....	7-18-07	7-18-07	.....	Settled, \$10 and costs.
Vigo.....	.....	Lloyd Clark, Terre Haute.....	Pies exposed.....	7-18-07	7-18-07	.....	Settled, \$10 and costs.
Vigo.....	9031	Carl Klatter, Terre Haute.....	Milk.....	7-24-07	7-24-07	.....	Settled, \$10 and costs.
Vigo.....	8968	Dan Holland, Terre Haute.....	Milk.....	7-17-07	7-17-07	.....	Settled, \$10 and costs.
Warren.....	8623	A. W. Harper, Williamsport.....	Lard.....	8-21-07	9-11-07	.....	Settled, \$10 and costs.

*Meat uncovered in transportation.

REPORT OF SANITARY INSPECTIONS.

The question of food control has always been considered an economic one; where the consumer has been defrauded in the purchase of his provisions, and where the health has been endangered by reason of the use of injurious adulterants. Under the new conditions created by rigid food laws, adulteration by the use of inferior substitutes, injurious colors and preservatives, and all the other illegalities which have been foisted upon the consumer for years, becomes for the most part a thing of the past, and food control takes on a new phase, that of rigid sanitary supervision of the manufacture and distribution of food products. This work, which has been largely neglected in the past because of the apparent necessity for preventing gross fraud, has now become the chief duty of the food inspectors.

The food laws insist upon correct labeling, prohibit substitution and reduction of quality, establish standards of purity and define all forms of adulteration. The new Federal Meat Inspection Law provides for the examination of all meats that enter interstate commerce, establishes sanitary conditions for slaughterhouses, prohibits the use of preservatives and chemicals and takes every precaution to insure the sale of sound and wholesome meat in interstate trade. And yet, while the meat supply of the large cities is necessarily shipped in from the great stockyards, thousands of our people, living in the country and smaller towns and cities, get all their meats from local dealers and butchers who kill and sell their own meats and are not subject to Government inspection. Under the new laws only sound beef can run the gauntlet of half a dozen inspectors and get to market. What becomes of the inferior stock, the lean and crippled beeves? Stock raisers soon learn the folly of sending such grades to the yards where they would only be condemned and discarded, and will place them where there is no inspection, that is, in the local markets. If Federal inspection is needed in the great packing houses, how much more is it needed in every country town and local slaughterhouse.

We are compelling food and drug manufacturers to guarantee the purity of every preparation to their customers. But while we are doing all of these things, while we are teaching honesty and elevating business morals by sheer force of law, we are neglecting almost entirely a most important phase of the food question. While we have been decrying canned meats as poisonous we have paid no attention to sanitary milk production, clean bake shops or whole-

some markets. We forget that meats sterilized by heat can not contain injurious bacteria and that our bread and milk may be swarming with the germs of filth even though they conform to all legal standards of strength and composition. It is well to prohibit the sale of skimmed or watered milk for whole milk, and of colored and preserved milk, because such sale is a fraud. But the vastly more important dairy inspection is not as yet effective except in a few isolated instances where local health officers are awake to the fact that milk is not always fit for consumption simply because it fulfills the requirements of some legislative standard.

The condition of the bakeries that now supply a large proportion of the bread, cake and pastries we eat merits investigation quite as much as do the dairies. The Massachusetts Board of Health took up the work during this last summer, and in a recent report show that of 536 shops inspected but 13, or two per cent., were so clean, well ventilated and lighted as to deserve especial commendation, while the condition of 247, or 47 per cent., was distinctly bad. Bake shops were located in dark, unventilated basements, and the workrooms were the homes of the employees. Here they lived and slept, and made bread for public distribution. The report condemns these shops in these words: "A large proportion of the establishments of this class call for energetic action on the part of the local authorities, and should be closed." What is true of the bakeries of Massachusetts is equally true in Indiana.

In all of our larger cities, especially in those sections where the foreign population lives, much of the food supply as well as the fruit and candies are sold from stalls and push carts in the streets. These stocks of goods are rarely protected from dust and filth and every wind that blows deposits its quota of germ-laden dirt on some article designed as food. The candies and ice creams that tempt the pennies from children's pockets, because of their moist and sticky nature, are the finest of food for bacteria, and should be sold under conditions of cleanliness that can not possibly be obtained in the open street. Food products can not be clean if they are made in dirty shops, displayed in dirty stores, sold by dirty men. They may comply with recognized standards of purity, that is, they may be properly labeled, of full weight, and made from the genuine article, but although they are passed as "inspected" they are not wholesome and should not be sold.

The grocery store or market is the distributing agent of the food manufacturer. It is probable that 95 per cent. of our food passes through the hands of the grocer or meat man. The prosperous

merchant is usually awake to the fact that his business will suffer if his shop is not attractive, and his stock fresh. But in every community there are some dealers whose meat blocks are unclean and covered with flies, whose refrigerators are slimy and foul smelling, whose back rooms are filled with accumulated filth, whose cellars are damp and dirty, whose dried fruit is wormy, whose fruit and vegetables are decayed, and whose cat sleeps in the cracker barrel.

All of these conditions are bad, more inimical to health than food adulteration as usually understood, and yet they are tolerated or ignored because of long familiarity. A good fight has been waged by the consumers against impure food. In their zeal they have even ostracized many good things that should be listed as wholesome and cheap. They have been looking, however, at one side of the question and have neglected the important fact, that foods though chemically pure may be sanitarily unfit to eat.

For these reasons a system of sanitary inspection and control is being developed that will embrace every place where food and drug products are manufactured and distributed. Five food and drug inspectors are now on the laboratory force, and in them is vested the authority necessary to control sanitary conditions and enforce the law with respect to adulteration. In making their inspections they are directed by the rules and regulations laid down in a pamphlet issued by the State Board of Health, Department of Food and Drugs, entitled: "The Pure Food and Drug Laws of the State of Indiana, Together with the Rules of the State Board of Health Establishing Minimum Standards and Defining Specific Adulteration of Food and Drugs."

The inspectors have visited 163 cities and towns, and examined 6,008 business places as to their sanitary condition. Out of 2,026 grocery stores 86 were found to be in an excellent condition, 791 were good, 942 were fair, 179 were poor and 28 were bad. The places reported as being in poor or bad condition were usually unclean or poorly lighted and ventilated. Of the 1,311 meat markets and slaughterhouses inspected, 38 were in excellent condition, 459 good, 620 fair, 130 poor and 64 bad. The meat shops were usually condemned as being poor or bad because of unclean conditions and foul refrigerators, and the slaughterhouses because of old, dilapidated buildings and general uncleanness. The drug stores, 892 of which were inspected, are on the whole kept in a much better condition than are the grocery stores and meat markets. Seventy-two were in excellent shape, 521 good, 270 fair, 29 poor and none were classed as being

bad. Six hundred and twelve bakeries and candy shops were inspected and 26 found to be in excellent condition, 248 good, 250 fair, 71 were poor and 17 were bad. The bakeshops were usually condemned because of unclean conditions; a few were poorly lighted and badly ventilated. Of the 824 hotels and restaurants examined, 37 were in excellent condition, 278 were good, 334 fair, 148 poor and 27 bad. The unsatisfactory conditions were usually uncleanliness and foul refrigerators. Two hundred and forty-six dairies have been inspected, of which 13 were excellent, 40 good, 107 fair, 47 poor and 39 bad. Decided uncleanliness and lack of proper ventilation and light account for the bad reports.

Five hundred and seventy-eight second inspections have been made, which have shown in most cases a marked improvement in sanitary conditions. The results of the work will become more and more apparent as inspectors grow familiar with their duties and have a better acquaintance with the districts in which they are employed.

The following table gives a summary of the results of inspections from the 1st of April to the 31st of October, 1907:

SUMMARY OF INSPECTIONS.

Inspections.	Number Inspected.	Number Excellent.	Number Good.	Number Fair.	Number Poor.	Number Bad.
Dairies.....	246	13	40	107	47	39
Groceries.....	2,026	86	791	942	179	28
Meat Markets and Slaughter Houses....	1,311	38	459	620	130	64
Drug Stores.....	892	72	521	270	29	0
Bakeries and Candy Shops.....	612	26	248	250	71	17
Hotels and Restaurants.....	824	37	278	334	148	27
Bottling Works, Breweries, etc.....	32	2	15	15	2	0
Chewing Gum Factories.....	1	0	1	0	0	0
Flour Mills.....	1	1	0	0	0	0
Poultry Houses.....	10	0	1	6	2	1
Butter Packing Houses.....	2	0	0	2	0	0
Ice Cream and Ice Factories.....	13	1	8	4	0	0
Canning Factories.....	29	0	10	14	3	2
Cold Storage.....	2	1	1	0	0	0
Fruit Stands.....	1	0	1	0	0	0
Sorghum Works.....	1	0	1	0	0	0
Packing Houses.....	1	0	0	1	0	0
Creameries and Pasteurizing Stations....	4	1	1	2	0	0
Number of First Inspections.....	6,008	278	2,376	2,565	611	178
Number of Second Inspections.....	578	25	185	330	37	1
Total number of Inspections.....	6,586	303	2,561	2,895	648	179

Abydel, Orange County: One grocery inspected, found to be in fair condition, although somewhat dirty.

Alexandria, Madison County.—Four groceries were inspected; 3 were found to be in good condition and one was fair. One slaughterhouse was in poor condition, due to the unclean and un-

sanitary premises and the bad shape of the killing floor. Of five meat markets, 3 were good and 2 were fair; 10 pounds of meat were condemned. Four drug stores were inspected and were found to be in good condition. One bakery was in fair condition. Of 5 hotels and restaurants, 3 were good and 2 were fair, the walls, ceilings and refrigerators were unclean.

Amo, Hendricks County: Three groceries were inspected, two of which were in fair condition and one was poor; the shelves, counters and the refrigerator were unclean. One meat market was inspected and was found to be in poor condition, the meat was not of good quality and the meat block was unclean. One drug store was in fair condition only, the goods were not clean and up to date, and the walls, ceiling and back room were not clean. One restaurant was visited and found to be in a poor condition, due to the unclean shelves and tables.

Anderson, Madison County: Seventy-one inspections were made. Of 3 dairies visited, 2 were good and one was fairly clean. Of 23 groceries, 12 were in good condition and 11 were fair. Of 18 meat markets and slaughterhouses, 9 were good and 9 were fair. Two were unclean. In one store 50 pounds of beef were condemned. Of 13 drug stores, 9 were good and 4 were fair. Of 10 bakeries and confectioneries, 3 were good, 6 were fair and one was in a poor condition. As the proprietor is building a new place, this bakery will soon be abandoned. Ten hotels and restaurants were inspected, 6 were found to be in good condition and 4 were fairly clean. The garbage was not removed daily.

Arcadia, Hamilton County: Two groceries inspected, condition good; 2 drug stores, 1 good, 1 fair; 1 bakery, good condition; 2 hotels, condition good.

Atlanta, Hamilton County: Two groceries inspected, condition good; 2 drug stores in good condition; 1 bakery and 2 hotels in good condition.

Attica, Fountain County: Nine groceries were visited; 3 were in good condition and 6 were found to be in fair condition only, due to the unsanitary condition of the refrigerators and walls. Three meat markets were inspected, and were in fair condition. One hundred sixty pounds of meat was condemned. Two drug stores were in good condition. Three bakeries and confectioneries were in a fair and poor condition, owing to the unclean condition. One hotel was in fair condition.

Aurora, Dearborn County: Thirteen groceries were inspected, 4 were good, 5 were fair and 4 were in a poor condition. Seven had

dirty shelves, counters, back shops or unclean dried fruits. Of four meat markets and slaughterhouses, 2 were good, one was fair and one was poor, having open floors and side walls. Ten days' notice was given to screen, whitewash and enclose the slaughterhouse. Three drug stores were in good condition, although the cellars were somewhat dirty. Six bakeries and confectioneries were visited, 3 were found to be in good condition, 2 were fair and 1 was poor. One restaurant was found to be in good shape. One hundred four cans of meat, 352 bottles of extract, 88 cans of baking powder and 15 bottles of catsup were condemned.

Austin, Scott County: Two groceries were visited and were found to be in a poor condition because they were not kept in a sanitary manner. Two canning factories were inspected and were in a fair condition, due to poor drainage.

Avon, Hendricks County: Two groceries were inspected and were found to be in a fair state of cleanliness.

Batesville, Ripley County.—Twenty inspections were made. Of 8 groceries visited, 5 were good, 2 were fair and 1 was poor on account of the general uncleanly conditions. Thirty-two cans of spices, 120 bottles of extract, 31 bottles of catsup and 332 cans of baking powder were condemned. Of 3 meat markets and slaughterhouses, 2 were good and 1 was poor. Ten days' notice was given to put slaughterhouse in a sanitary condition. Of 3 drug stores, 2 were good and 1 was fair. Three bakeries and confectioneries were inspected and were found to be in a fair and poor condition. The goods were not properly handled and the bakeshops were not clean. Two hotels and 1 restaurant were inspected and were found to be in a good, fair and poor condition, respectively. The walls, shelves and tables were unclean.

Bedford, Lawrence County: Pine Hill dairy inspected, found to be in excellent condition. Seven groceries inspected, 1 good, 4 fair and 2 were poor, the stores being badly lighted and ventilated and the counters dirty; 4 meat markets were visited, 2 fair, 2 poor, the refrigerators were unsanitary; 2 drug stores, 1 fair and 1 poor, the back shops being unclean; 2 bakeries, 1 good, 1 fair; 2 hotels, 1 good and 1 poor.

Bloomfield, Greene County: Thirty-four inspections were made; of two dairies inspected, one was in good condition and one was bad, owing to general uncleanliness. Eight groceries were inspected, 2 were fair, six, on account of the unsanitary condition of the refrigerators, shelves, counters and back shops, were in fair condition only. Six meat markets were visited, one was good, 4 were

fair and one was in poor condition, having a foul refrigerator and being unclean. One slaughter house was condemned on account of the unsanitary surroundings. Nine drug stores were inspected, 6 were good, having clean and up-to-date goods, 3 were fair; the prescription counters being unclean. One bakery was in fair condition, and orders were given to clean up. Nine hotels and restaurants were visited; 3 were good, 2 were fairly clean and two were classed as poor owing to unsanitary conditions; the employes were not neat and the floors and refrigerators were unclean, two were bad, being poorly lighted, ventilated and having unsanitary refrigerators.

Bloomington, Monroe County: Thirteen groceries inspected, of which 6 were good, 5 fair, 1 poor and 1 bad, being uncleanly and having foul refrigerator. Seven meat markets were inspected, 6 were good and 1 was fair; 7 drug stores, of which Bowles Bros.' was found to be in excellent condition, while 3 were good, 2 fair and 1 poor. Four bakeries and candy shops were visited; 2 were good, 1 fair and 1 poor. Twelve second inspections were made, eleven of which showed good conditions and one was fair; 184 cans of potted chicken and ham, 1 jar pickles, 55 bottles of extract, 8 jars of apple jelly, 11 jars of jam and 7 bottles of catsup were condemned.

Boonville, Warrick County: Fifteen groceries were inspected; 5 were good, and 10 were fair. Eighty pounds of bacon were condemned. Two meat markets were in good condition. Edward Bohrer's drug store was in excellent condition, and two others were good. Three bakeries were visited; 1 was good, and 2 were fair. Three restaurants were inspected; 2 were good, and 1 was in fair condition. One canning factory, just starting, was in good condition.

Brazil, Clay County: Twenty-one inspections were made. One dairy visited was found to be in good shape. Of 8 groceries, 1 was good, and seven were fair, being unclean. Three slaughter houses were inspected, all were in a fair condition. Orders were given to clean up and fence hogs away from the slaughter house. The meat market owned by Jones & Company was in excellent condition; two were good and one fish market was in poor shape, having unclean walls, floors, shelves and counters. One drug store was in good shape. Of three bakeries, 1 was good and two were fairly clean. The pasteurizing station of Johnson Brothers was in excellent condition.

Brownstown, Jackson County: Twenty-one inspections were

made. Seven groceries were inspected, 4 were good and 3 were fair. One refrigerator was found to be in an unsanitary condition and the back shop was not clean. Three bottles of extract were condemned, being old stock. Of four slaughter houses and meat markets inspected, 3 were fair and one slaughter house was in a poor condition and was condemned. Of five drug stores inspected, 3 were good and 2 were fair, 4 had unclean back shops. One bakery was fairly clean. Of 4 hotels and restaurants visited, 2 were in good shape, 1 was fair and 1 was poor.

Cambridge City, Wayne County: One ice cream factory was in fair condition. Two canning factories were in a fair and bad condition. Better ventilation, drains and cement floors were ordered. Three drug stores were in good condition. Of 8 groceries, 6 were good and 2 were fair. Twenty pounds of candy were condemned. One meat market and one slaughter house were in fair condition. The meat market was not properly lighted and ventilated and the garbage was not removed daily. Two bakeries were fairly sanitary. Three restaurants were found to be in fair condition.

Campbellsburg, Washington County: Three groceries were visited; one was good, one fair and one poor, having a dirty floor. One meat market was fair. Two drug stores were in good shape. Two restaurants were visited and were found to be in a fair and poor condition; the shelves, tables, sinks, etc., were unclean. One creamery was rated fair on account of the bad drainage, and one canning factory was rated poor, due to the open floors and bad drainage.

Cannelton, Perry County: Of 12 groceries inspected, that of P. Clemens' Sons was excellent; 2 were good, 5 were fair, and 4 were poor. Nine were unclean, and 2 were poorly lighted and ventilated. One meat market and one slaughter house were in fair condition. The meat market was poorly lighted and ventilated and the premises about the slaughter house were unsanitary. Three drug stores were in good condition. Three bakeries and confectioneries were inspected; 1 was good, and 2 were in fair condition. Two hotels were inspected; "The Only Sunlight Hotel" was in excellent condition; 1 was fair. One bottling works was in fair condition.

Carmel, Hamilton County: Four groceries were in good condition; 1 meat market was in good condition; 1 slaughter house condemned as being in an unsanitary condition; 1 drug store and 1 hotel were in good condition; 1 candy shop was in fair condition.

Chambersburg, Orange County: Two groceries inspected found to be in fair condition.

Charlestown, Clark County: Eight groceries were visited, of which three were good, three were fair and two were poor. Four slaughter houses and meat markets were visited, of which two were in fair condition and two were poor, and were given ten days to comply with orders. Two drug stores were in good condition. One bakery was marked fair, due to the unsatisfactory light and ventilation. One hotel was in fair condition. One creamery was in good condition and one canning factory was in a bad shape. There was no drainage, the floors were not clean and were open, and the refuse was thrown out in the yard. Orders were left to make improvements at once.

Cicero, Hamilton County: Two groceries were in good condition; also 1 meat market and 1 drug store were in good condition; 2 bakeries were in a good and a fair condition, the latter being unclean; 3 hotels were inspected, 2 were good and 1 was fair.

Clarksville, Clark County: Four groceries were inspected. One was in good shape and three were fair, two were not well lighted and ventilated and one had unclean shelves and counters. One meat market was in fair shape.

Clinton, Vermillion County: Two slaughter houses were inspected, one was found to be in a bad condition and was condemned. The other slaughter house was found to be in poor shape, due to the unsanitary condition of the premises. Ten pounds of meat were condemned.

Columbia City, Whitley County: Two groceries and 2 drug stores were in good condition, while 1 meat market was in fair condition, and 1 resaurant was poor, having dirty floors, being poorly lighted and ventilated, and food being exposed. Two restaurants were in good condition.

Columbus, Bartholomew County: Two dairies were inspected and were found to be in a fair condition. Of 30 groceries inspected, the one belonging to Will Wetz was excellent, 9 were good, 17 were fair and 3 were in poor condition, being unclean. Of 11 meat markets and slaughter houses, 3 were good, 5 fair and 3 poor, being poorly lighted and ventilated and having unclean refrigerators and floors. Theodore E. Otto's drug store was classed excellent, 7 were good and 1 was in fair condition. Eight bakeries and candy kitchens were inspected; the Greek candy store, owned by Zaharako Bros., was excellent, 2 were good and 5 were fair. Five restaurants were visited; 2 were good and 3 were fair, being unclean.

Connersville, Fayette County: Seven groceries were visited. A. H. Rieman's grocery was in excellent shape, four were good and two were fair. Three meat markets were inspected; two were good and one was fair. The garbage was not removed daily. Of four drug stores inspected three were good and one was fair. Five bakeries and confectionery shops were visited. Four were good and one was fair, due to the goods not being properly handled. Orders were left to protect confectionery. Four restaurants were visited. One was good and three were fair. The garbage is not removed daily and the refrigerator was not in a sanitary condition.

Corydon, Harrison County: Six groceries were visited; the W. H. Keller Company has an excellent store, 4 were in good condition and one was poor, due to uncleanness. One slaughter house was in poor shape and orders were left to put the premises in a sanitary condition. One fish market was in good condition. Of two meat markets, one was good and one was fair. One creamery and one bakery were inspected and found to be in good condition. Of three drug stores, two were good and one was fair on account of the prescription counter being unclean. Of ten restaurants and hotels visited, 3 were in good condition, five were fair and 2 were poor, being unsanitary. One canning company was inspected and found to be in fair shape, although the drainage was poor.

Covington, Fountain County: Of nine groceries inspected, that of Mr. Dennis was found to be in excellent condition, 4 were good and 4 were fairly clean. Two meat markets were in good condition and one was fair. Four drug stores were inspected, 3 were good and 1 was fair. Two confectioneries were in good sanitary shape. Of 4 bakeries, one was good, 2 were fair, due to the goods not being handled properly and a general uncleanly condition, and 1 was rated poor because the walls were unclean. Six restaurants and hotels were inspected, 2 were good, 1 was fair and 3 were poor and bad, due to the bad condition of the floors, shelves, tables, sinks; the uncleanly appearance of the employes and the poor ventilation and light in the dining rooms. One canning factory, 1 ice cream factory and 1 bottling works were in fair condition.

Crawfordsville, Montgomery County: Of 5 dairies inspected, 1 was in good condition and 4 were fair, owing to the general condition of uncleanness. Of 12 groceries inspected, 4 were good, 6 were fair and 2 were poor. Four refrigerators were unclean. Six groceries were unclean, and 3 were poorly lighted and ventilated.

Eight meat markets and slaughter houses were inspected; 2 were good, 3 fair, and 3 in poor condition. Five were unclean, 4 had foul refrigerators. Nine hundred and thirty pounds of meat were condemned. Eight drug stores were visited; 3 were good, 4 were fair, and 1 was poor. Three were unsanitary, and 4 had foul refrigerators. Of 6 bakeries and candy shops, 4 were good, and 2 were fair. Of 3 hotels and restaurants, 1 was fair, and 3 were in poor condition, being poorly lighted, unclean, and having foul refrigerators. One bottling works was in excellent condition.

Crothersville, Jackson County: Three groceries were inspected. The condition of 1 was good, while 2 were fair. The dried fruits were not clean. Two meat markets and 2 slaughter houses were inspected. The meat markets were in fair shape, while the slaughter houses were in a poor and bad condition. The floor and side walls were open and there were no screens. Ten days' notice was given to place premises in a sanitary condition. Three drug stores were visited, of which 2 were good and 1 was fair, having a dirty back shop and cellar. One restaurant was in fair condition; the walls and ceilings were unclean. One fruit canning factory was in good shape.

Crystal, Dubois County: Two groceries were inspected and were found to be in a fair and poor condition. The shelves, counters, walls and back shops were unclean.

Dale, Spencer County: Five groceries were inspected, 3 were good and 2 were fair. Fourteen cans of meat and 17 bottles of extract were condemned. Two inspections were made at meat markets and slaughter houses, which were found to be in fair condition. One drug store, having an unclean back room and unclean prescription counter, was rated fair. One bakery and 2 hotels were rated fair. The refrigerator was unclean. Five boxes of meat were condemned. One creamery was in good sanitary condition.

Danville, Hendricks County: Three groceries were classed as good, fair and bad; twenty gallons of vinegar and two dozen bottles of catsup were condemned. Four drug stores were visited, 1 was in a good and 3 were in a fair condition. One quart of ferric chloride was condemned. One meat market was in good condition, while one slaughter house was condemned. One hotel was in fair condition, the walls, ceilings and refrigerator being unclean.

Dayton, Tippecanoe County: Four groceries were found to be: 1 good, 1 fair, 1 poor, and 1 bad. One drug store was in fair condition, but the fountain was unsanitary. One restaurant was in bad condition, being unsanitary.

Delphi, Carroll County: Of 3 dairies visited, 1 was in good condition and 2 were in fair shape and were ordered to be cleaned up. Of 10 groceries, that of Ralph Hill was in excellent condition, 4 were good and 5 were fair, being poorly lighted and ventilated. Four had unclean back shops, shelves and counters and 1 had a foul refrigerator. Of 6 meat markets and slaughter houses, 2 were in good condition, 3 were fair and 1 was in bad shape and was condemned. Six drug stores were visited, that owned by W. S. Margowski was in excellent condition, 3 were good and 2 were in fair condition. Of 4 bakery and confectionery shops, 2 were good and 2 were fair, being unclean. Nine hotels and restaurants were visited, 7 were fair, having unclean floors, walls and ceilings, and 2 were poor, due to poor light, ventilation and being unclean. One cannery was in good shape and 1 bottling works was found to be in fair condition.

Dugger, Sullivan County: Three groceries were in good shape. One meat market was in good condition. Notice was given to cover meat. Two slaughter houses were in fair condition. Notice was given to put premises in a sanitary condition. Two drug stores were found to be in a good and fair condition. The goods were not up-to-date; the proprietor and clerks were not clean and tidy. Three restaurants were in good and fair condition. Notice was given to remove garbage, clean yard and fix drain.

Dunreith, Henry County: One canning factory was visited and was found to be in good sanitary condition.

Eaton, Delaware County: Two groceries were visited; 1 was good and 1 fair. Of 3 meat markets and slaughter houses, 1 was in good condition, and 2 were in fair condition. One drug store was in fair condition. Two hotels were in a good and fair condition.

Ellettsville, Monroe County: One drug store and 1 restaurant were in fair condition. The kitchen was not well lighted and ventilated, and the shelves, tables and sinks were not clean. Three groceries were inspected, 2 were good and 1 was fairly clean; 18 cans of potted ham were condemned. Two meat markets were in fair shape and 1 slaughter house was given ten days to comply with orders and make changes to put the premises in a sanitary condition.

Elwood, Madison County: Of 5 groceries, 1 was good, 3 were fair, and 1 was in poor condition, having a foul refrigerator and being unclean. Ten meat markets were visited; 2 were in good condition, 7 were fair, and 1 was poor. All 10 were in an unclean

condition, and 5 had foul refrigerators, while 1 was poorly lighted and ventilated. One confectionery was in fair condition. Five drug stores were visited, 3 were good, 2 fair. One hotel was classed as good.

English, Crawford County: Four groceries were visited; 3 were good, and 1 was in fair condition. One meat market was in fair condition, and 1 slaughter house was in a poor condition and was arranging to go out of business. One drug store was in good condition. One restaurant was good, and 1 was poor. One bakery was fair. One canning factory was getting in line preparatory to canning tomatoes.

Evansville, Vanderburg County: Thirty-eight dairies were inspected, of which 8 were good, 20 fair, 9 poor and 1 was in bad condition and was condemned. Ninety-three groceries were visited. William E. Meier's grocery was in excellent condition, 27 were good, 37 fair, 26 poor and 3 were bad, being very unsanitary; 25 were unclean, 8 refrigerators were unsanitary and 3 were poorly lighted and ventilated. Forty-five meat markets and slaughterhouses were inspected; 1 meat market and the Evansville Packing Company slaughterhouse, which is also under government inspection, were in excellent condition, 7 were good, 27 fair, 8 poor and 1 was bad, being unclean. Twenty-nine drug stores were inspected, 17 were good, 11 fair and 1 was poor, being unsanitary. Twenty-six bakeries and confectioneries were inspected, bakeries owned by Mrs. Jacob Smidt and Fred Miller, and the confectionery owned by Christian Bros., were found to be in excellent condition, while 9 were good, 9 were fair, 2 were poor and 3 were bad. One bakery was condemned until placed in a sanitary condition, ten days' notice was given to comply with orders. Orders were given to cover all candies and pastry. Twenty-three hotels and restaurants were inspected; the Evansville Depot Restaurant was in excellent condition, 5 were classed as good, 6 fair, 10 poor and 1 bad. Three restaurants were unclean and 4 had foul refrigerators. Three bottling works and 1 brewery were also visited and all were found in fair condition. Eleven second inspections were made. Of 8 groceries inspected, that of W. E. Meier's was in excellent condition, 5 were good and 2 were fair; 115 bottles of extract, 62 cans of meat, 50 boxes of spices and 25 cans of fruit were condemned. Three drug stores were in good condition.

Fairmount, Grant County: Of 5 groceries inspected, those of E. W. Jay, Hall & Hall and W. R. Bailey were excellent; 2 were in good condition. Of 7 meat markets and slaughterhouses, 3 were

good, 2 fair, 1 poor, and 1 bad. The conditions surrounding this slaughterhouse are very unsanitary. Four drug stores, 4 bakeries and 3 restaurants were in good condition.

Farmersburg, Sullivan County: Two groceries were visited; 1 was good and 1 was fair.

Fort Branch, Gibson County: Sixteen inspections were made. Of 6 groceries, 4 were in good condition and 2 were fair, being unclean. One meat market was in good condition, while 2 slaughter houses were in fair condition only, and were given ten days' notice to comply with orders. Two drug stores were in fair condition, due to dirty prescription counters. One bakery was found to be in good shape. One poultry house was in fair condition. Of three restaurants visited, 2 were fair and 1 was in a bad shape, being unsanitary; 12 cans of oysters, 92 cans of potted meats and 96 bottles of extracts were condemned.

Fortville, Madison County: Four groceries were inspected; 2 were good and 2 were fair. Five meat markets were inspected; 2 were good and 3 were fair, being unclean. One bakery was in a fair condition. One restaurant was in good condition, and one dead animal house was in fair condition.

Fort Wayne, Allen County: Thirty-one dairies were inspected. The following were in excellent condition: Peter Certia, John Kent and Ellison Dairy Company; 5 were good, 7 fair, 4 poor and 12 bad, on account of the general uncleanly condition, lack of drainage, etc. One place is described as being "filthy beyond description;" at another dairy visited typhoid fever existed. Of 14 groceries inspected, those of G. E. Spiegel, J. J. Corman, G. Hitzemann, Kennedy & Darby, Charles H. Buck and Kayser & Boade were in excellent condition; 5 were good and 3 were in fair condition, being badly lighted, ventilated and unclean. Of 3 meat markets, 1 was good, 1 fair and 1 poor. Of 18 drug stores inspected, 17 were in excellent condition, and 1 was in good condition. Of 4 bakeries and candy shops inspected, that of James Bruno was in excellent condition; 1 was good, 1 fair and 1 poor, being unclean. Of 20 hotels and restaurants, the following were excellent: James Selby, Mrs. J. Klinger, C. Wagner, J. C. Hinton, J. A. Reilly, and Mrs. C. Frederick. Six were good, 3 fair, and 5 in poor condition; 4 were unsanitary; 2 had foul refrigerators. Two packing houses were in fair condition; the drainage was poor and the sanitary surroundings were bad. The Berkhoff Brewery and the wholesale houses of the National Biscuit Co., where 120 are employed; the Perfection Wafer Co., employing 150, and the Heil-Miller-Lane

Co., confectionery, were in excellent condition, being sanitary in every respect.

Frankfort, Clinton County: Six dairies were inspected; all were unclean, being in a fair and poor condition. These dairies were all ordered to be improved to comply with the law. Twenty-two groceries were inspected, of which the wholesale grocery of R. P. Shanklin & Co., McDowell, Britton & Cheadle Company, and the wholesale grocery of J. C. Shoffer & Company were found to be in excellent condition. Fourteen were good and 6 were in a fair condition. Two dozen bottles of extract were condemned. Seven meat markets and slaughter houses were visited, 4 were good, 2 fair and 1 was bad. Three slaughter houses were ordered to be improved to comply with the law. Two drug stores were visited; Elbert B. Merrill's was in excellent condition; the other one was in good shape. Of 3 hotels and restaurants visited, 1 was good and 2 were fair. Out of 4 bakeries and candy shops, that of Crane Brothers was excellent, 2 were good and 1 was poor, being unsanitary. One canning factory was inspected and was found to be in poor condition, being very dirty and using rotten products. Ten second inspections were made. Merritt's drug store, Pavey Bros'. grocery and the wholesale grocery of McDowell, Britton & Cheadle were in excellent condition. Three groceries and 1 dairy were in good shape, while 1 grocery and 1 dairy were in fair condition, on account of uncleanness.

Franklin, Johnson County: Nine groceries were inspected; 7 were good and 2 fair. Six meat markets and slaughter houses, and 4 drug stores, were in good condition. Three bakeries and confectioneries were visited; 1 was fair and 2 were poor, being unclean and dishes not being properly washed. Three hotels and restaurants were visited; 1 was good and 2 were fair, the refrigerator, tables, sinks, shelves, etc., were unclean. One ice cream parlor was visited; the soda fountain was not in good condition.

Fredericksburg, Washington County: Two groceries were classed as good and fair. One drug store was in good condition.

French Lick, Orange County: Five groceries were visited, of which the store of Wells, Cave & Glenn was in excellent condition, 3 were good and 1 was fair. Of 5 meat markets and slaughter houses inspected, that of Wells, Cave & Glenn was excellent, 3 were good and 1 was in fair condition. Three drug stores were visited. Eleven hotels were visited. The French Licks Springs Hotel and the Wells Hotel were in excellent condition, while 2 were good and 7 were in fair condition.

Galena, Floyd County: One grocery was in fair condition.

Galveston, Cass County: Of 3 groceries inspected, that of G. W. McCoy was excellent; 1 was good, and 1 was fair, being unclean. One meat market was in good condition. One drug store was in good condition. One bakery was fairly clean. Of 3 hotels and restaurants, 2 were good and 1 was fair, being unclean. One ice cream factory was in good condition.

Gary, Lake County: Four restaurants were inspected; those owned by Walter McNally and M. Schwarz were in excellent condition; the other two were fairly clean.

Gas City, Grant County: Sixteen inspections were made. Of 6 groceries visited, 3 were good and 3 were fair; the refrigerator was not clean and the garbage was not removed daily. Of 5 meat markets, 1 was good and 4 were fair. One drug store was in good shape. One bakery and three restaurants were in fair condition, being unclean. Fifteen pounds of dried peaches were condemned.

Greencastle, Putnam County: One dairy was inspected and found to be in a fair condition. Nine groceries were inspected; the one owned by Charles Broadstreet was in excellent condition; 2 were good, 5 were fair, and 1 was poor, having unclean refrigerator and floor. Of 6 slaughter houses and meat markets, 3 were good, 1 was fair, 1 poor, and 1 bad; 884 pounds of meat were condemned, and three slaughter houses were condemned until made to meet the requirements of the law. Four drug stores were visited. The Red Cross Drug Company was in excellent condition; 2 were good, and 1 was fair, having an unclean prescription counter. Two bakeries were inspected; 1 was fair and 1 poor. The goods were not properly handled and the bakeshops were unclean. Three restaurants were inspected; 1 was good, and 2 were poor. The garbage was not removed daily and the floors were not clean.

Greenfield, Hancock County: Seven groceries were inspected, 4 of which were good and 3 were fair. Seven meat markets and slaughter houses were inspected; 4 were in good condition and 3 were fair. The premises about the slaughter houses were not clean and sanitary. Four drug stores were in good condition. Four bakeries and confectioneries were inspected, and all were in fair condition. Of 5 hotels and restaurants visited, 4 were good and 1 was fair; the refrigerators, walls and ceilings were unclean.

Greensburg, Decatur County: Six meat markets and slaughter houses were inspected. The slaughter house and meat market of Link & Bobrink and H. Kammerling's meat market were in excel-

lent condition. Two were good and 2 in bad condition, being unsanitary. The De Ormond Hotel was in excellent condition, while the other one inspected was rated good. One bakery was inspected and was in a dirty condition. Two groceries were inspected and found to be in good condition.

Greentown, Howard County: One grocery inspected was found to be in fair condition; 2 meat markets were in good condition; 2 drug stores, 2 bakeries and 1 hotel were found to be in a fair condition.

Greenville, Floyd County: Three groceries inspected; 1 was good and 2 were fair; 2 hotels were in a fair condition.

Hammond, Lake County: Nine groceries were inspected. Jas. L. Humpfer & Co.'s grocery and meat market was in excellent condition, 7 were good and 1 was fair; 11 meat markets were inspected, 1 was excellent, 8 were good and 2 were fair; 5 drug stores were in good condition. Of 10 bakeries and candy shops inspected, 7 were good and 3 were poor, being in an unclean condition. Ten calves were shipped from Crown Point to Hammond in an unsanitary condition; the men were arrested and fined \$10 and costs each, and the court ordered the condemned meat to be tanked. One fish dealer was found to be mixing old fish and fresh fish, which caused 45 pounds to be condemned, and he was fined \$10 and costs. Fifteen pounds of meat out of refrigerators were also condemned. Of seven hotels and dining rooms inspected, 6 were good and 1 was fairly clean. Bread and cakes that were exposed to dirt and flies were ordered to be covered up.

Hardinsburg, Washington County: The plant of the Hardinsburg Creamery Company was in excellent condition; 3 groceries were in good, fair and poor condition, being unclean; 3 hotels were inspected, 1 was good and 2 were fair.

Haysville, Dubois County: Two groceries and 1 restaurant were found to be in fair condition, due to unclean shelves and counters.

Henryville, Clark County: Of 6 groceries inspected 1 was good and 5 were fair. The dried fruits in 5 stores were unclean. One meat market was in poor condition; the floor, walls, ceilings and refrigerator were not clean. One lunch stand, which consisted of a screened place on the street, with sawdust floor, was in a poor condition. One hotel was fairly clean. One canning factory was in fair condition. The drainage was not what it should be.

Hillham, Dubois County: Two groceries were in a fair state of cleanliness.

Howell, Vanderburg County: Two drug stores and one bakery

and confectionery were in good condition. Three hotels and restaurants were inspected; 2 were good and 1 was in a poor condition, due to unclean floors, shelves and tables. Of 5 groceries visited, 1 was good and 4 were fair, having unclean back shops, shelves and counters. Fifteen bottles of extract, 17 cans of meat, 5 bottles of maple syrup and 5 cans of apple butter were condemned. Two meat markets were in good condition and 1 slaughter house was rated poor. Ten days' notice was given to comply with orders.

Huntingburg, Dubois County: One creamery was found to be in good condition. Of 12 groceries visited, that owned by W. F. Bretz was in excellent condition; 6 were good and 5 fair, being unclean. Of 3 meat markets, 1 was good, and 2 were fair. Of 3 drug stores, that of A. H. Miller, Jr., was in excellent condition; 1 was good, and 1 fair. Four bakeries and confectioneries were inspected; 2 were in good condition, and 2 were fair. Seven hotels and restaurants were visited; 4 were good, 2 fair, and 1 poor. Three were unclean, and in 2 the dish washing was not properly done. One brewery was good, and 1 poultry house was fair, being unclean.

Twenty-one second inspections were made. Much improvement is shown over the inspections made two months ago. Of 11 groceries inspected, that of W. F. Bretz was in excellent condition, 7 were good and 3 were fair. Two restaurants and 2 meat markets were in good condition. Orders had been carried out completely. Two drug stores were inspected, that of A. H. Miller, Jr., was found to be in excellent condition. One other was in good condition. Two bakeries were in good condition and one confectionery was fair, due to dirty shelves and counters. One hundred sixty-four bottles of extracts were condemned, being old stock.

Huntington, Huntington County: Of 4 groceries inspected, that of McCaffrey Brothers was in excellent shape, 2 were good and 1 was fair, having a dirty back shop, floor, shelves and counters. Three meat markets were visited. Those of N. Winde-muth and L. A. Ertzinger were in excellent condition, while the third was good. Of 4 drug stores examined, A. J. Stevens and Schaefer & Schaefer were excellent, 2 were fair; in one store the goods were not clean and up to date. Of 3 bakeries and confectioneries visited, 2 were good and 1 was poor, having dirty floor, walls, ceilings, shelves and counters. Of 3 restaurants visited, 1 was good, 1 fair and 1 poor. Two were unclean and 1 was poorly lighted and ventilated.

Indiana Harbor, Lake County: One grocery and 1 meat market were found to be in good condition.

Indianapolis, Marion County: Four dairies were inspected and were found to be in fair condition. Of 281 groceries inspected the following were found to be in excellent condition: Columbia Grocery Company, N. A. Moore, R. M. Mueller, George Popp, J. T. Powers & Son, M. C. Shea, Goldstein & Cooke, and J. M. Carvin & Son; 113 were in good condition, 148 were fairly clean, 11 were in a poor condition and 1 was in bad shape. Ten refrigerators were in an unsanitary condition. Eighty-three pounds of candy and 75 pounds of dates were condemned. Of 219 meat markets inspected, the following were found to be in excellent condition: Charles Gardner, Goldstein & Cooke; 93 were in good condition, 116 were fair, 6 were poor and 2 were bad. Seven refrigerators were unsanitary. Two hundred and fifty pounds of meat out of refrigerators, 400 pounds of mutton and 15 pounds of wienerwurst were condemned. Of 137 drug stores inspected, the following were found to be in excellent sanitary condition: Muhl Drug Company, Weber Drug Company, J. J. Keene Number 1, C. H. Eichrodt, Frank H. Carter, E. H. Wilson and Ed. Ferger's; 77 were in good condition, 49 were fair and 4 were poor; 8 were unclean. One gallon fountain syrups was condemned. Of 72 bakeries and candy shops inspected, Taggart's bakery was in excellent condition, 24 were good, 38 were fair, 5 were poor and 4 were in bad shape, being unsanitary and having bread, cakes, candy, etc., exposed to dirt and flies. Of 39 hotels and restaurants inspected, L. S. Ayres's restaurant was classed as excellent, 11 were in good shape, 19 were fair, 6 were poor and 2 were in bad shape, due to general uncleanness. One winery was in good condition. Four hundred and eighty-five second inspections were made. Of 218 groceries, 8 were excellent, 45 good, 154 fair, 10 poor and 1 bad. Of 72 meat markets and slaughter houses, 4 were excellent, 22 good, 39 fair and 7 poor. Of 69 drug stores, 39 were good, 26 fair and 4 poor. Of 74 bakeries and candy shops, 7 were good, 59 fair and 8 poor. Of 52 hotels and restaurants, the Claypool Hotel and Hopkins restaurant were excellent, 18 were good, 29 were fair and 3 were poor. Two bottling works and 1 Coca Cola works were found to be in fair condition. Sixty-seven pounds of meat out of ice boxes, 15 pounds of sausage and 21 quarts of blackberries were condemned.

Jasonville, Greene County: Seven groceries were inspected; 6 were fair, and 1 was poor; all were unclean. Three meat markets were visited and 95 pounds of meat were condemned. Two meat markets were in fair condition, and 1 was poor. All had unclean

refrigerators. Two drug stores and 1 bakery were in good condition. Six hotels and restaurants were visited; 5 were fair and 1 was poor; all were unclean. One bottling works was in good condition.

Jasper, Dubois County: Two drug stores and 1 meat market were in good condition. Of 7 groceries inspected, that of John T. Melchior was in excellent condition, 4 were good and 2 were fair, having unclean refrigerators or back shops. Eighteen bottles of extract and 4 bottles of catsup were condemned. Two confectioneries were in good condition. One bakery was in fair condition. Two hotels were in good condition, while 1 restaurant was rated fair, due to the damp cellar and the poor light in the kitchen.

Jeffersonville, Clark County: Twenty groceries were inspected. Best Bros.' grocery was found to be in excellent condition, 4 were good, 11 fair, 3 poor and 1 bad; 7 meat markets and slaughter houses were inspected; 2 were good, 3 fair and 2 were poor. Of 7 drug stores, 6 were good and 1 was fair. Of 3 bakeries and candy shops, 2 were good and 1 was fair. Of 3 hotels and restaurants, 1 was good, 1 fair and 1 poor.

Jonesboro, Grant County: One restaurant, 1 bakery, 2 drug stores, 4 groceries and 1 meat market were all in good sanitary condition, excepting the garbage was not removed daily. One dairy was in a fair state of cleanliness.

Kellerville, Dubois County: One grocery was inspected and found to be in fair condition. No screens were provided for the doors and windows.

Kirklin, Clinton County: Five groceries were visited; 3 were in good condition, while 2 were in fair condition. Two meat markets were inspected; that of Oliver M. Neal was excellent, the other was in fair condition, having a foul refrigerator and being unclean. One creamery was inspected and found to be in poor condition, and was ordered improved to comply with the law. One slaughter house was ordered improved as to sanitary conditions. Two drug stores were visited and were in good and fair condition.

Knightstown, Henry County: One dairy was visited and was found to be in fair condition. The conditions as to light and ventilation were bad. Five groceries were visited; 3 were good and 2 were fair. Of 7 meat markets and slaughter houses inspected, 3 were good, 3 fair and 1 was bad, and the owner is going to rebuild. Of 4 drug stores visited, 3 were good and 1 was in fair condition. Two bakeries were in fair shape. Three restaurants were inspected, and 2 were found to be in fair shape, while 1 was good. The garb-

age was not removed daily and the restaurants were fairly clean. One sorghum-works was inspected and was in good condition. A new floor was ordered to be put in. *

Kokomo, Howard County: Seven grocery stores were inspected; 1 was in good condition and 6 were in a fair condition. Of 8 meat markets, 7 were fair and 1 good. Five drug stores were in good condition. Five bakeries and candy shops were visited, 4 were good and 1 was poor, being unventilated, unclean and having a foul refrigerator. Nine hotels and restaurants were visited. The Hotel Francis was in excellent condition, 5 were good, 1 fair and 2 poor.

Lafayette, Tippecanoe County: Ninety-nine first inspections and ten second inspections were made. Of 27 dairies visited, 1 was in good shape, 11 were fair, 9 were poor and six were in bad condition. Three dairies were condemned until the premises were put in a sanitary condition. One dairy license was annulled. Notice was given many dairymen to clean up in a week or their places would be condemned. Notice was given some 15 dairymen to clean up, drain and whitewash and place their dairies in a better sanitary condition. Of 29 groceries visited, the following were in excellent condition: Beck & Frasch, James Fox, and the wholesale grocery houses of R. V. Pierce & Company, R. P. Shanklin & Company and Monnehan's. Seven had foul refrigerators and 25 were unclean. Of 25 meat markets inspected, 7 were good, 11 were fair and 7 were poor. Sixty pounds of meat and two dozen bottles of tomato catsup were condemned. Of 8 drug stores visited, those of Albert H. Kienly and the Lafayette Pharmaceutical Company were found to be in excellent condition, 4 were good and 2 were fair, on account of the unsanitary condition of the fountain and an unclean prescription counter. One confectionery and one bakery were in a good and poor condition, the bakeshop was not clean and the goods were not properly handled. Of 10 hotels and restaurants inspected, 3 were good, 4 were fair and 3 were poor. Eight were unclean and 2 had foul refrigerators. Many did not remove the garbage daily. One wholesale liquor house was in good condition and 1 creamery and 1 packing house were in fair condition. Two meat markets which had been inspected before were in fair condition only. Twenty-five pounds of fish were condemned. Of 8 dairies which had been inspected before, 1 was good, 5 were fair and two were in a poor condition and were condemned until made to comply with the law.

Lawrenceburg, Dearborn County: Ten dairies were inspected

1 was fair, 2 were poor and 7 were in a bad condition. The following feed their cows on slop from distilleries: Henry Bobrink, Jr., Henry Bobrink, Sr., W. P. Squibbs & Co., and Oberting Bros. Twelve groceries were inspected, 3 were good, 8 were fair and 1 was poor. Five meat markets were visited, 4 were good and 1 was in fair condition. Of 5 drug stores, 4 were good and 1 was in a fair condition. Five bakeries and confectioneries were visited, 2 were good, 1 was fair and 1 was in a poor condition. Two restaurants were inspected and were found to be in good and fair shape. One brewery was inspected and was in fair shape. The Lawrenceburg Milling Company, which is the largest mill in the State, was found to be in excellent condition.

Lebanon, Boone County: Two groceries were inspected; 1 was good and 2 fair. Three meat markets were good. One slaughter house was ordered improved to comply with the law. Five drug stores were visited; 3 were good and 2 fair. Three bakeries and candy shops were rated as good, fair and poor. Six hotels and restaurants were inspected, 4 were good, 2 were fair; the one owned by Frank Dale was in excellent condition.

Lewis, Vigo County: Three groceries were inspected, 2 were good and 1 was fair. One meat market, being very unsanitary, was classed poor.

Linton, Greene County: Ten dairies were inspected; 2 were good, 4 fair, 3 poor, and 1 bad. Four were unclean. Eighteen gallons of milk were condemned. Of twelve groceries inspected, the Linton Supply Company was in excellent condition, 3 were good and 8 were fairly clean. Eight bottles of lemon extract and 12 bottles of mustard were condemned. Of 12 meat markets and slaughter houses inspected, 5 were good, 2 were fair and 5 were in bad condition, being very unsanitary. Three were condemned, and two previous condemnations were continued. Ninety pounds of meat and 25 pounds of lard were condemned. The Linton Bottling Works was in excellent condition. Three drug stores were inspected; that of Henry Steelman was excellent, 1 was good and 1 was fairly clean. The confectionery owned by W. A. Murray was in excellent condition. One confectionery was in fair shape, 1 bakery was in poor condition and 1 ice cream factory was in a fair condition. Of 7 hotels and restaurants inspected, 2 were good, 1 was fair, 3 were poor and 1 was in a bad condition, and orders were left to give same a general overhauling. Five were unclean, badly lighted and ventilated and had foul refrigerators.

Logansport, Cass County: Thirty inspections were made. Of

9 groceries visited, that owned by J. H. Foley & Company was in excellent condition, 6 were good and 2 were in fair condition. Of 13 meat markets and slaughter houses, 5 were in good condition, 7 were fair and one was in bad shape and was condemned. Ten pounds of beef and 15 pounds of mutton were condemned. Two drug stores were in good condition and 1 was in fair shape only. Four bakeries and candy shops were visited; 2 were good and 2 were in fair shape. The ice cream factory owned by W. I. Shearer & Son, was in excellent condition, having cement floors and being sanitary in every respect. Of 4 hotels and restaurants, 2 were good and 2 were in fair condition.

Loogootee, Martin County: Nine groceries were inspected; 3 were good, 5 fair and 1 poor, being unclean. Five meat markets and slaughter houses were inspected; 1 was good, 1 fair and 3 were in a bad condition and were ordered to make their places sanitary. One poultry house was in a bad condition and extensive improvements were ordered. Two drug stores were in good condition. Opal Brothers, confectionery and candy kitchen, was in excellent condition. One bakery was in good condition. Two hotels and restaurants were in poor condition, being poorly lighted, the floor, ceiling and walls were unclean, and the dishes were not properly rinsed. One hundred pounds of meat were condemned.

Madison, Jefferson County: Of 32 groceries, 9 were good, 17 fair, and 6 were poor, being unclean, poorly lighted and ventilated. Of 18 meat markets and slaughter houses, those of Henry Schneider and Gus Yunker were excellent; 7 were good, 8 fair, and 1 poor. Of 10 drug stores, that of Jas. Hargan, Jr., was excellent; 4 were good, 3 were fair, and 2 were poor, being unclean. Of 10 bakeries and candy shops, 3 were good, 6 fair, and 1 was poor. Of 3 restaurants, 1 was good, and 2 were poor. One brewery and 1 chewing gum factory were inspected.

Marengo, Crawford County: Four groceries were inspected; 1 was in good condition, 2 were fair, and 1 was poor. Three were somewhat dirty, and 1 refrigerator was unclean. One meat market and one slaughter house were visited; 1 was in poor condition, and 1 was bad. The premises were very unclean and unsanitary. Of 3 drug stores inspected, 1 was in good condition, and 2 were in fair condition. One confectionery was in good condition. Two restaurants were in poor condition, being unsanitary in that the walls, floors, refrigerators, etc., were unclean, and the dishes were not properly washed and rinsed. One canning factory was inspected and arrangements were made for better sanitary conditions.

Marion, Grant County: One creamery was visited and was found to be in fair condition. Of 20 groceries inspected, the following were in excellent condition: M. L. Swaysee, M. E. Barton and J. H. Poston. Eleven were in good condition, 5 were fair, and 1 was poor. Four were unclean. Of 15 meat markets and slaughter houses inspected, the following were excellent: Levy Sons, M. L. Swaysee, B. F. Long and Arthur Street. Eight were good, 2 were fair, and 1 was in poor condition. Three were unclean. Of 4 drug stores inspected, 3 were in good condition, and 1 was fair. One confectionery was in bad condition, being very unsanitary. Of 16 hotels and restaurants inspected, the dairy lunch owned by Turner Overman and the restaurant owned by M. C. Wallet and Clay Mullen were in excellent condition. Six were in good condition, 5 were fair, 2 were poor, and 1 was bad. Four were poorly lighted, and 6 were unclean, and 1 had foods exposed to dirt and flies; 1 was very unsanitary and needed a general overhauling. Two ice companies were found to be in good condition.

Martinsville, Morgan County: Fifteen groceries were inspected. That of C. W. Rose was in excellent condition, 4 were good, 8 were fair and 2 were poor, not being sanitary. Four had foul refrigerators. Six meat markets and slaughter houses were inspected. One was good, 4 were fair and 1 was poor. Orders were left to make improvements, screen, whitewash, etc. Ten days' notice was given to comply with orders. Six drug stores were in good condition. Two bakeries were in a fair and poor condition; the store rooms were not tidy or well kept. Nine hotels and restaurants were inspected. Two were good, 5 were fair and 2 were poor. The dining rooms were good but the kitchen arrangements and store room facilities were bad. One packing company was in good condition.

Mechanicsburg, Clinton County: Of 3 groceries inspected, 2 were in good condition, and 1 was poor. One meat market was in a poor condition, having a foul refrigerator and being unclean.

Memphis, Clark County: Three groceries were visited, of which 1 was good and 2 were fair, having unclean shelves, counters and ceilings. One canning factory was in fair condition; the floors were open and the drainage was bad.

Michigan City, Laporte County: Three groceries and 1 drug store were found to be in good condition. Four slaughter houses were inspected and were found to be in a fair, poor and bad condition. One slaughter house was condemned, notice was given the others to clean up or their places would be condemned. Twenty-

five pounds of meat were condemned. One ice cream factory was in good condition. Four bakeries and confectioneries were visited, 2 were found to be in good condition and two were fair, the draft tubes in the soda fountain were dirty, the bakery was not clean and the goods were not properly handled. Two restaurants were in a good and fair condition, the refrigerator was not clean and free from odor.

Mishawaka, St. Joseph County: One slaughter house was inspected and was found to be in good condition.

Mitchell, Lawrence County: Eleven groceries were inspected, that of Head & Coleman was in excellent condition, 5 were good and 5 fair. Two meat markets and 2 bakeries were in fair condition. Of 4 drug stores, 3 were fair and 1 good. Of 3 restaurants and 1 hotel, 2 were fair and 2 were poor.

Monticello, White County: One grocery and one drug store were in good condition. The bakery and confectionery owned by T. G. Harlocker was found to be in excellent condition. Two manufacturers of soft drinks had good places. One hotel was in good condition and 1 restaurant was in poor shape. Notice was given to clean up and fix walls of kitchen at once.

Mooresville, Morgan County: Seventeen inspections were made. Of 9 groceries inspected, 1 was good, 6 were fair and 2 were bad, being in an unsanitary condition; the back shop, shelves and counters were unclean. Four meat markets were inspected and found to be in a fair state of cleanliness. Four drug stores were visited, 3 were fair and 1 was poor; the goods were not clean and up to date and the patents were not properly labeled. One bakery was in good condition and 1 ice cream parlor was in a fair state of cleanliness. Of two hotels and restaurants visited, 1 was good and 1 was fair; the dining room was not well ventilated or lighted.

Mount Vernon, Posey County: Seven groceries were inspected; Klein & Mason's grocery was found to be in excellent condition; 1 was good, 3 were fair, 1 was poor and 1 bad, the sanitary conditions being very poor. Seven cans of meat, 16 bottles of extracts and 7 cans of cream were condemned. Four meat markets and slaughter houses were found to be in good and fair condition. Ten days' notice was given to comply with orders to clean up premises. Three drug stores were visited; that owned by D. & H. Rosenbaum was in excellent condition, 1 was good and 1 was fair. One ice cream parlor and 1 confections and fruits were in good condition. Five hotels and restaurants were found to be in fair and poor condition. All were unclean; the rooms were not well lighted or ventilated,

the floors, walls and ceilings were not clean, and the dishes and tableware were not properly washed. Thirteen second inspections were made. Of 7 groceries visited, that of Klein & Masen was in excellent condition, 4 were good, 1 was fair and 1 was poor. Of 3 drug stores visited, that of D. & H. Rosenbaum was in excellent condition and 1 was in good condition. Three restaurants were found to be in a fair and poor condition, due to uncleanness.

Mulberry, Clinton County: Three dairies were inspected and all found to be in a bad condition. One creamery and 2 dairies were ordered improved to comply with the law. Four groceries were inspected and 1 classed good, 1 fair and 2 bad, being unsanitary, badly ventilated and lighted. Four meat markets were visited; 2 were good and 2 fair. One slaughter house was ordered improved to comply with the law. Two drug stores were found to be in a good and fair condition. Two restaurants were in good condition.

Muncie, Delaware County: One hundred and eleven inspections were made. One dairy was found to be in fair condition. Of 28 groceries inspected, 9 were in good condition, 18 were fair and 1 was poor. Many stores were not provided with screens and the garbage was not removed daily. Fifteen pounds of dates were condemned. Thirty-three meat markets and slaughter houses were inspected, 10 were in good condition, 21 were fair and 2 were poor, the premises not being in a sanitary condition. Four meat markets were unclean and 2 had foul refrigerators. Two hundred pounds of pork and 75 pounds of beef were condemned. Of 12 drug stores inspected, 11 were in good shape and 1 was fairly clean. One ice factory and milk depot was in good condition. Of 18 bakeries and candy shops, that of Richard Cunningham's was in excellent condition, 2 were good, 14 were fair and 1 was poor, being poorly lighted, ventilated and unclean. Of 18 hotels and restaurants inspected, 2 were in good shape, while 15 were fair and 1 was poor. The garbage was not removed daily, the walls and ceilings were unclean or the refrigerator was not free from odor.

New Albany, Floyd County: One milk station was found in good condition. Fifty groceries were inspected. The following grocery stores were excellent: The Great Atlantic and Pacific Tea Company, R. L. Grosheider, and August Oetken; 11 were good, 27 fair, 7 poor and 2 were bad. The New Albany Ice Company was in excellent condition. One brewery was in good condition. Of 40 meat markets and slaughter houses, 4 were good, 29 fair, 5 poor and 2 were bad. Of 14 drug stores, those of Chas. B.

Dorsey and A. N. Hoover were excellent, 6 were good and 6 were fair. Six bakeries and candy shops were visited; Stein's bakery was in excellent condition, being sanitary in every respect, 2 were good and 3 fair. Eight hotels and restaurants were inspected, of which 3 were good, 3 fair and 2 were poor, being badly lighted and ventilated and unclean.

Newburg, Warrick County: Of eight groceries visited, 3 were good, 4 were fair and 1 was poor. Three were unclean. Seventy-six bottles of extract, 31 cans of meat, 11 cans of baking powder, 23 cans of tomatoes, 9 bottles of catsup and one glass of jelly were condemned as being old stock. One canning factory was in fair condition. Two hundred pounds of tomato pulp were condemned. Two meat markets and 2 drug stores were found to be in good condition. One confectionery was in fair condition and 1 bakery was in poor shape, owing to the dirty condition of the bakeshop. One restaurant was in fair condition, not being well lighted or ventilated, and the dishes were not properly rinsed.

New Castle, Henry County: Thirty-six inspections were made. Three dairies were in fair shape. Changes will be made to better the unsanitary conditions. One creamery and ice cream plant was in fair shape, due to water standing under the wooden floor. Five drug stores were in good condition. Of 9 groceries visited, 4 were good and 5 were fair. Of 7 meat markets and slaughter houses inspected, 2 were good, 4 were fair and 1 was poor, the premises were in very bad shape, the floor was very dirty, there being no drainage. Ten days' notice was given to place premises in a sanitary condition. Five bakeries and confectioneries were inspected; 1 was good and 4 were fair, the shops were not sanitary or the goods were not properly handled. Of 6 restaurants, 1 was good and 5 were fair. Two were unclean and 3 had foul refrigerators.

New Harmony, Posey County: Seventeen inspections were made. Three drug stores and 1 confectionery were in good shape. One hotel was good and 3 restaurants were fair, due to unclean walls and ceilings. Four meat markets and slaughter houses were visited; 3 were good and 1 was poor. Ten days' notice was given to comply with orders. Of 5 groceries visited, 3 were good, 1 was fair and 1 was poor. Two were unclean and 1 was badly lighted and ventilated. One hundred and sixty-five bottles of extract, 12 packages tomale, 12 packages of pork and beans, and 6 cans of beef were condemned.

Newport, Vermillion County: Four groceries were inspected. One was good, 2 were fair and 1 was poor. All were unclean and

1 had a foul refrigerator. Two meat markets were in good shape. Of 2 drug stores visited, 1 was good and 1 was fair; both were unclean. One bakery was in good condition. Of 4 restaurants and hotels inspected, 1 was good and 3 were fair; 2 were unclean and were not well lighted or ventilated.

Noblesville, Hamilton County: The dairy depot of Harris & Craw was inspected and found to be in excellent condition. Nine groceries were inspected, those of A. D. Conden and Caylor's being in excellent condition, 3 were good, 3 fair and 1 poor. Of 5 meat markets inspected, 4 were fair and 1 was poor. Five drug stores were inspected, that of C. L. Mitchell being excellent and 4 were good. One bakery is in good condition. Of 3 restaurants, that of John Guinon was excellent, 1 was fair and 1 poor, being in an unclean condition.

North Vernon, Jennings County: Twelve groceries were inspected, 5 were good, 5 were fair and 2 were poor, being in an unsanitary condition. Four slaughter houses were inspected, 1 was fair and 3 were in poor condition. Ten days' notice was given to drain properly, screen and whitewash. Four meat markets were inspected, 3 were fair and 1 was in a bad condition; the refrigerator was foul and the general condition was somewhat dirty. Of 5 drug stores, 4 were good, 1 was poor, the goods were not clean and up to date, and the store was not well lighted and ventilated or kept clean. Of 2 bakeries, 1 was good and 1 was fair. Eleven hotels and restaurants were inspected. The German Hotel was in excellent condition, 3 were good, 2 were fair, 3 were poor and 2 were bad; the dishes were not washed and rinsed properly and the employes were not neat. One canning factory was in poor condition, the floor was open and an open ditch was the only means of drainage. One creamery was found to be in fair condition.

Oakland City, Gibson County: Six groceries were visited. That owned by A. Deutsch & Bro. was in excellent condition, 1 was good, and 4 were in a fair condition. Four were unclean, and 1 was badly lighted and ventilated. Three meat markets were inspected; 1 was in good condition, and 2 were fair, being unclean. Of 4 drug stores inspected, 3 were in good condition, and 1 was fair. One bakery and 1 ice cream stand were inspected and were in a fair and poor condition respectively. Five hotels and restaurants were inspected; 4 were in good condition, and 1 was fair, being unclean. Four poultry houses were inspected; 2 were found to be in fair condition, and 2 were in poor condition.

Orangeville, Orange County: One grocery was inspected and found in good condition.

Orleans, Orange County: Four groceries were inspected; Hol-
lowell Bros.' grocery and meat market was in excellent condition,
2 were good and 1 was poor, having dirty refrigerator and back
shop. Six meat markets and slaughter houses were inspected; 3
slaughter houses were in poor condition and were given two weeks
to make their places sanitary; 2 were good and 1 was fair. One
drug store was good and 1 fair. One bakery was in fair condition.
Five hotels and restaurants were visited, 2 were good and 3 were
fair, the kitchen not being well ventilated and lighted.

Osgood, Ripley County: Three groceries were found to be in an
excellent, good and fair condition. That of McCoy & Bovard was
in excellent condition. Of 4 meat markets and slaughter houses, 3
were in good condition and 1 was poor, the floor was open, there
were no screens and the place was not whitewashed and kept in a
sanitary condition. Ten days' notice to comply with orders was
given. Three drug stores were in good condition. Three bakeries
and confectioneries were inspected, 2 were good and 1 was poor,
the employes were not clean and tidy and the goods were not prop-
erly handled. One hotel was in good shape and 1 restaurant was
fairly clean. Fifty-five bottles of extract were condemned as being
old stock.

Otisco, Clark County: Three groceries inspected. Two were
poor and 1 was fair. Two were unsanitary. One canning factory
was in fairly good shape.

Owensville, Gibson County: Two groceries were inspected; 1
was good and 1 was fair. Three hundred and sixty-six bottles of
extract, 12 cans of potted ham, 17 cans of veal loaf and 4 cans of
roast beef were condemned. Four meat markets and slaughter
houses were inspected, 2 were good, 1 was fair and 1 was poor.
Ten days' notice to comply with orders was given. Two drug
stores were in good condition. Four hotels and restaurants were
inspected, 1 was good and 3 were fairly clean.

Palmyra, Harrison County: The Silver Lake Creamery Com-
pany was found to be in excellent condition. Two groceries were
in a good and fair condition. One confectionery was in a fair con-
dition and 1 hotel was in good condition.

Paoli, Orange County: Three dairies were inspected. The Lost
River Dairy was in excellent condition. The Paoli Creamery Com-
pany was in excellent condition, 1 dairy was good. Seven gro-
ceries were inspected; the store of L. H. Buskirk & Bro. was in ex-
cellent condition, 5 were good and 1 was fair. One meat market
was good. Three drug stores were inspected; the drug store of S.

F. Teaford is in excellent condition, 2 were classed good. Five hotels and restaurants were inspected; 3 were good and 2 fair. One slaughter house was inspected and was found to be in poor shape. Ten days' notice was given to repair the old building or 30 days to build a new one. Instructions were given how to build a sanitary slaughter house.

Peru, Miami County: Four dairies were inspected and were found to be in a fair and poor condition. Of 16 groceries inspected, that owned by McCaffery & Company was in excellent condition, 13 were good and 2 were fair, being unclean. Of 14 slaughter houses and meat markets visited, those of McCaffery & Company and J. W. Miller were found to be in excellent condition, 10 were good, 1 was poor and 1 was bad. One slaughter house was condemned. Six drug stores were inspected; those of R. E. Murphy and H. F. Miller were in excellent condition; 4 were in good condition. Nine bakeries and confectioneries were visited; James Dickman's confectionery, and Mercer & Company's bakery were in excellent condition, 6 were good and 1 was fair. One ice cream factory and 1 canning factory were in good condition. Ten hotels and restaurants were visited; 8 were in good condition and 2 were fairly clean. One brewery was in good condition.

Petersburg, Pike County: Six groceries were visited; 2 were in good condition, and 4 were fair. Two slaughter houses were inspected, 1 was good, and 1 fair. Four drug stores were inspected, 1 was good and 3 were fair. The bakeries and candy shops were visited; 2 were good and 1 was fair. Four hotels and restaurants were inspected; 1 was good and 3 were fair. One poultry house was in a fair condition.

Pittsburg, Carroll County: One dairy was inspected and was found to be in a bad condition; orders were given to put the place in a sanitary condition. One confectionery was in fair condition. Two grocery stores were in fair condition and 2 meat markets were in poor condition. The garbage was not removed daily in a number of places visited, the floors, walls and counters were unclean. Twenty pounds of meat were condemned.

Plainfield, Hendricks County: Five groceries were inspected, Reagan and Carter's grocery was found to be in excellent condition, 1 was good, 2 were fair and 1 was poor, having a foul refrigerator. Four were unclean. Eight slaughter houses and meat markets were visited, 4 were good, 2 were fair and 2 were bad, being in an unsanitary condition. Of 6 drug stores visited, the Plainfield Drug Company was found to be in excellent condition, 1

was good, 3 were fair and 1 was poor, there being much old stock and the store not being kept in an orderly manner. Orders were left to renovate stock and clean up. Two bakeries were visited, 1 was poor and 1 was fairly clean. Orders were given to clean up and whitewash. Of 5 hotels and restaurants visited, that of Sanders Smith was in excellent condition, while 2 were good and 2 were fair.

Plymouth, Marshall County: Twenty-eight inspections were made. Schlosser Brothers' Creamery was in excellent condition. Three bakeries and confectioneries were in good condition. Of 9 hotels and restaurants, that of Mrs. Strang was found to be in excellent shape, 7 were good and 1 was fair. Four drug stores were inspected, J. W. Rinard's was in excellent condition, 3 were good. Of 7 groceries inspected, the following were excellent: F. A. Jaccox and Frank Vangilder, 4 were good and 1 was fair, due to unclean refrigerator and back shop. Of 4 meat markets visited, the following 2 were excellent: Fred H. Kuhn and J. Swindell & Brother, dealers in poultry and eggs.

Poseyville, Posey County: Four groceries were visited, 2 were good, 1 was fair and 1 was poor, the floor, walls, ceiling, shelves and counters being unclean. Twelve packages of halibut, 26 bottles of extract, 15 bottles of catsup, 12 cans of meat and 24 jars of jelly were condemned. One meat market was in good shape. One slaughter house was in bad shape and they were given ten days' notice to comply with orders and put place in a sanitary condition or quit business. One drug store was in good shape. Two restaurants were fairly clean, having dirty walls and ceilings, shelves and tables.

Princeton, Gibson County: Nine groceries were inspected. Riggs' Spot Cash Grocery was found to be in excellent condition, 7 were good and 1 was poor, being unclean. One hundred and seventy-one cans of meat, 149 bottles of extract and 24 quarts of maple syrup were condemned. Six meat markets and slaughter houses were visited, 1 was good, 2 were fair and 3 were poor. Thirty days were given to comply with orders. Of 5 drug stores visited, 4 were good and 1 was fair. Six bakeries and candy shops were inspected, 3 were good, 2 were fair and 1 was poor. Four restaurants were visited, 2 were good, 1 was fair and 1 was poor, not being well lighted and clean. One canning factory was in fair shape.

Rego, Orange County: One grocery was inspected and found to be in good condition.

Richmond, Wayne County: Nine groceries were inspected; 8 were good and 1 was fair. Eight meat markets and slaughter houses were inspected; 3 were good, 3 fair and 2 were bad and were condemned. Five pounds of old meat were condemned. Nine drug stores were visited; 6 were good and 3 in a fair condition. Three bakeries were visited; 2 were in good condition and 1 was poor, having foul refrigerator, unclean floor, walls, etc. Five hotels were inspected; 2 were classed good, 2 poor and 1 fair.

Roachdale, Putnam County: Three groceries were inspected; 2 were good and 1 was in fair condition. Four meat markets and slaughter houses were inspected; 1 was good, 2 were fair, and 1 was in poor condition. Two were unclean, and 1 slaughter house was condemned. One drug store was inspected and was in a poor condition; the goods were not clean and up-to-date and the clerks were not clean and tidy. One confectionery was in good condition. Two restaurants were inspected; 1 was in good condition, and 1 was fair, the employes were not neat and the shelves, tables, sinks, etc., were unclean.

Rochester, Fulton County: One dairy was inspected and was found to be in poor condition. The building is old and the only means of ventilation is by doors and cracks. Two groceries, 2 restaurants and 1 bakery were in good condition. Of 6 meat markets and slaughter houses, 3 were good and 3 were bad, and were condemned as food producing establishments. Two drug stores were inspected; that of Geo. V. Dawson was in excellent condition, while the other one was fair. The floor was not clean and the fountain was unsanitary. One creamery was inspected and was found to be in good condition.

Rockport, Spencer County: Seven groceries were inspected; 4 were good and 3 were fair, 2 had foul refrigerators, and 1 was unclean. Three meat markets and slaughter houses were visited; 2 were in good condition, and 1 was fair. Three drug stores were inspected; that of T. C. Basye was in excellent condition, 2 were in good condition. Two confectioneries and 1 ice cream parlor were visited; 1 was in good condition, and 2 were fair. Of 6 hotels and restaurants visited, 4 were fair, 1 was poor, and 1 was in bad condition, due to foul refrigerators and general uncleanness.

Rockville, Parke County: Four groceries were visited. One was good, 2 were fair and 1 was poor. Three were unclean. Two meat markets were in fair condition; both were unclean, and forty-three pounds of preservatives were condemned. Of 4 drug stores inspected, 3 were good and 1 was fair. The fountain was not sani-

tary and the goods were not clean and up-to-date. One bakery was in good condition. One confectionery was in fair condition, and notice was given to clean fountain and the premises in general. Five hotels and restaurants were visited. One was good, 3 were fair and 1 was poor. Four were unclean and 3 had foul refrigerators. Notice was given to clean kitchen and back yard.

Rushville, Rush County: Five groceries were inspected and all found to be in good condition. One meat market and 3 drug stores were in good condition. One bakery was in poor condition, being badly lighted and ventilated and unclean.

Salem, Washington County: One creamery was examined and found to be in a fair condition. Nine groceries were visited; 5 were good and 4 were fair. Four meat markets were visited; 2 were found to be in good condition and 2 were in a fair condition. Four drug stores were inspected; H. C. Hobbs' drug store was in excellent condition, 2 were in good condition and 1 was fair. One bakery was in fair condition. Seven hotels and restaurants were inspected; 3 were in good condition, 2 were fair and 2 were in a poor condition, having dirty floors and dirty walls and untidy employes.

Scottsburg, Scott County: Ten groceries were inspected. Three were good, 6 were fair and 1 was poor. Two were unclean. Three meat markets and slaughter houses were inspected, and all were in a fair condition. Three drug stores were in fair condition. In one the back room of shop was unclean, and in the other the fountain was not sanitary and the prescription counter was unclean. Three bakeries and confectioneries were inspected, and two were found to be in fair condition, while the third was in a bad condition, and if a new place is not built in six months the place will be condemned. Three restaurants were visited. Two were fair and 1 was poor. Two were unclean and 1 did not have efficient ventilation and light. Two canning factories were in fair condition, the drainage was bad and the floors were open.

Sellersburg, Clark County: Two groceries were inspected and found to be in good condition. Three meat markets were in fair condition. The drainage in the slaughter house was ordered to be made more effective, the floors to be kept better, the tank to be removed in a room separate from the rendering room and effective screens. One drug store was in good shape. One confectionery was in a bad shape and was ordered to be cleaned up at once. One canning factory was visited and was found to be in a poor condition, due to the dirty floors, lack of drainage, etc. Orders were left to better conditions at once.

Seymour, Jackson County: Twelve groceries were visited, of which the Model Grocery was rated as excellent, 3 were good, 7 fair and 1 was poor, having unclean back shop and cellar. Twelve meat markets and slaughter houses were inspected; 2 were in good condition, 7 were fair and 3 were in a bad condition and were condemned. Five drug stores were in good condition. Four bakeries and candy shops were inspected; 2 were in good condition and 2 were in fair condition. Six hotels and restaurants were inspected; 4 were in good condition and 2 were in fair condition. One dead animal contractor was given notice to eliminate offensive odors.

Shelbyville, Shelby County: Two dairies were visited and were found to be in fair and poor condition due to uncleanness. Of 16 groceries visited, 5 were in good condition, 9 were fair and 2 were poor, being dirty and having an unsanitary refrigerator. Screens were not provided for doors and windows, and the back shops were unclean. Two stores were not well lighted or ventilated. Six meat markets and slaughter houses were inspected, 2 were good, 3 were fair and 1 was poor. Orders were left to clean out cistern, drain, make floor tight and clean up the premises. Eleven drug stores were inspected; that of Robert W. Buxton was in excellent shape, 7 were good and 3 were fair, the shelves, counters and back shops being somewhat dirty. Of 11 bakery and confectionery shops, 3 were good and 8 were fair. The pastry was ordered to be covered. Of 6 hotels and restaurants visited, 1 was good, 3 were fair and 1 was poor, as there is only a board partition part way to the ceiling between the store and the living room. Four restaurants were unclean, 3 were badly ventilated and 2 were not well lighted.

Shoals, Martin County: Of 11 groceries inspected, 2 were good, 8 were fair, and 1 was in poor condition, having a foul refrigerator and being unclean. Two drug stores were inspected; 1 was fair and 1 was poor. One bakery was in good condition. Three restaurants were inspected; 2 were fair, and 1 was poor.

South Bend, St. Joseph County: Five groceries were in good condition. Eight meat markets and slaughter houses were inspected. That of James A. Collard was in excellent condition, 4 were good, two were fair and 1 was poor, the premises being in an unsanitary condition. Ten confectioneries and bakeries were inspected. The Philadelphia Restaurant Company was in excellent condition, as they had a clean soda fountain, ice cream factory and candy factory. Charles Gromi's confectionery and ice cream factory, which is in the basement, was in excellent condition, 5 were

good and 3 were fair; there were no screens and the flies were plentiful. Seven hotels and restaurants were inspected. Kables and M. F. Calnon were in excellent shape, while 3 were good and 2 were fair, 1 was unclean, and 1 had a foul refrigerator. The Armour cold storage was in excellent condition, while the other one inspected was good.

Stewartsville, Posey County: Three groceries were inspected, 2 were good and 1 was fair. Eighteen bottles of extract were condemned.

Stinesville, Monroe County: Two groceries were visited; 1 was good and 1 was in fair condition.

Sullivan, Sullivan County: Two dairies were inspected and were found to be in bad condition. Ten gallons of milk were condemned. Nine groceries were visited; 6 were good, and 3 were fair, being unclean. Eight meat markets and slaughter houses were inspected; 3 were good, 2 fair, 2 poor, and 1 was in a bad condition. One thousand three hundred and fifty-five pounds of meat were condemned, including a tuberculous hog which had been prepared for market. Four drug stores were inspected; 2 were good, and 2 were in a fair condition. One-half gallon fountain syrup, which had fermented, was condemned in a confectionery, which was classed as being in a fair condition, 1 confectionery and 1 bakery were in good condition. Five hotels and restaurants were inspected; 1 was good, 1 fair, 1 poor, and 2 were bad. Four were very unclean and the employes were not neat. One ice cream factory and one bottling works were in good condition.

Summitville, Madison County: One confectionery, one bakery and two drug stores were in good condition. Five groceries were inspected; 3 were good and 2 were fair. Three meat markets and slaughter houses were visited; 1 was good and three were in fair condition, all being unclean. Two restaurants were in good and fair condition; the garbage was not removed daily.

Swayzee, Grant County: Three drug stores and one hotel were in good condition. Two groceries were in good and fair condition and 2 meat markets and slaughter houses were in good and fair condition; the premises about the slaughter house were not clean and sanitary.

Switz City, Greene County: Two groceries were inspected; one was poor and 1 fair, due to the unclean floors, refrigerators and back shops. One meat market was in fair condition. The meat not being of good quality, 45 pounds were condemned. One drug store was inspected and was in fair condition. The prescription

counter and back shop were not clean. Three hotels and restaurants were visited; 2 were in fair condition and one was in a poor condition. In all three the shelves, tables, sinks, walls and ceilings were unclean.

Tell City, Perry County: Twelve groceries were inspected; 5 were good, 5 fair, and 2 were poor, being unclean. Ten meat markets and slaughter houses were visited; the inspector found 2 good, 5 fair, and 3 poor. Three were unclean, and 2 had foul refrigerators. Three drug stores were in good condition. Four bakeries and candy shops were inspected; 3 were in good condition, and 1 was poor. Four hotels and restaurants were visited; the Commercial Hotel was found to be in excellent condition, three were in fair condition, not being well ventilated, well lighted or clean. One bottling works and 1 canning factory were in fair condition. Three breweries were inspected; 2 were in good condition, and 1 was fairly clean.

Terre Haute, Vigo County: Seven dairies were inspected, of which 1 was good, 5 fair and 1 poor. The general condition as to cleanliness was fair. Thirty-two groceries were visited; 7 were good, 19 fair, 5 poor and 1 bad, having a foul refrigerator and an untidy back yard and back room of shop. Of 25 meat markets, 2 were good, 16 fair, 5 poor and 2 bad. Many orders were given to proprietors to have their places put in a sanitary condition. Eighteen drug stores were inspected. The Buntin Drug Co. was in excellent condition, 9 were good, 7 fair and 1 was poor, but the proprietor is soon to move into a new place. Four bottling works, one coca cola works and one winery were inspected; 3 were good, 2 fair and 1 poor. Twenty-six ice cream manufactories, bakeries and confectioneries were inspected. The ice cream parlor owned by Peter Georgopoulos was in excellent condition, 12 were good, 8 fair, 4 poor and 1 bad; this bakery had dirty floors, walls, tables, shelves and sinks and was not well ventilated or lighted. Fifteen hotels and restaurants were visited; 3 were good, 6 fair, 6 poor. Three restaurants had foul refrigerators and the employes were not neat. Thirty pounds of meat were condemned.

Thorntown, Boone County: One dairy was inspected and found to be in fair condition; the means of ventilation was fair and means of drainage bad. Six groceries were inspected; the grocery owned by Ben Honecker was in excellent shape, the other 5 were good. Three meat markets were inspected; that owned by Jaques & Crouch was in excellent condition, the other 2 were good. Three drug stores were visited; W. C. Burk's drug store was in excel-

lent condition, 1 was good and one was fairly clean. Three bakeries and candy shops and three hotels and restaurants were good and fair. The general conditions were very good.

Tipton, Tipton County: Of fifteen groceries inspected, 7 were in good condition, 6 were fair and two were poor, due to unclean shelves, counters and back shops. Three had foul refrigerators. Seventeen slaughter houses and meat markets were visited; that owned by Ray Moore was in excellent condition; 3 were good, 9 were fair and 4 were in poor condition. One meat market had a foul refrigerator and the other had an unclean meat block, while another had a bad floor. Twenty pounds of meat and 35 pounds of fish were condemned. Three slaughter houses were condemned until put in better condition. Of 7 drug stores inspected, that of the Red Cross Drug Company was in excellent shape, 2 were good, 3 were fair and 1 was poor on account of the general unclean conditions. Of 6 bakeries inspected, 2 were good, 3 were fair and 1 was poor, being unclean. Orders were given to clean up and paint. Eleven restaurants and hotels were visited; 4 were good, 4 were fair and three were in a poor condition, having foul refrigerators and unclean floors. One had spider webs and paper hanging from the walls and ceilings. One sewage outlet was found to be stopped up. One canning factory was in good shape.

Underwood, Clark County: One canning factory was inspected and found to be in poor condition. The drainage was fair, the condition under the floor was bad and the floor had holes in it. Notice was given to improve the sanitary conditions at once.

Union City, Randolph County: Eight groceries were inspected; those of C. J. Turpen, and Platt & Son were excellent; 6 were good. Three meat markets were inspected; that of Veil Bros. was excellent, 1 was good, and 1 was fair. Of 5 drug stores inspected, that of James E. Stewart was excellent; 2 were good, and 2 were fair. Five ice cream parlors and 3 restaurants were in good condition.

Upland, Grant County: Of 4 groceries visited, 3 were in good condition and 1 was fair. One meat market and 1 slaughter house were fairly sanitary. One drug store was in good condition and 1 was fair, the shelves, counters and back shop were unclean. One bakery was in fair shape. Two restaurants were visited; 1 was good and 1 was found to be in a fair condition, due to poor ventilation, poor light and an unclean refrigerator.

Valeene, Orange County: Two groceries were inspected; 1 was good and 1 was poor, the floor, shelves and counters were unclean

and the store was not well ventilated and lighted. One drug store was in poor condition, the goods were not clean and up-to-date and the store was badly lighted and ventilated.

Van Buren, Grant County: Five groceries were visited and all were in good condition. Two meat markets and one slaughter house were found to be in fair condition only. Ten pounds of beef were condemned. The premises about the slaughter house were not clean and sanitary. The back rooms of the meat markets were not clean and tidy. One bakery was in fair condition.

Veedersburg, Fountain County: Seven groceries were inspected; 6 were fair, and 1 was poor. Five were unclean, and 3 had foul refrigerators. Two meat markets were found to be in fair condition due to dirty refrigerators and floors. Of 3 drug stores inspected, 1 was good, and 2 were in fair condition. Two fountains were unsanitary. One confectionery and 1 bakery were inspected and found to be in poor condition, being unclean. Two restaurants and 1 hotel were inspected and found to be in fair condition. All three were unclean; 2 were poorly lighted and ventilated, and one had a foul refrigerator.

Vincennes, Knox County: Twenty-two groceries were inspected; 6 were good, 16 fair, and 3 were in poor condition. Nine meat markets and slaughter houses were visited; 2 were good, 4 fair, and 3 were poor. Of 10 drug stores, that of Moore & Miller was excellent; 2 were good, and 7 were fair. Three were unclean. Nine bakeries and candy shops were visited; 4 were good, 4 fair, and 1 was poor. Of 15 hotels and restaurants inspected, 1 was good, 5 were fair, 8 were poor, and 1 was bad. Five were unclean, 2 had foul refrigerators, and 3 were poorly ventilated and lighted. One bottling works was inspected and was found to be in fair condition.

Wabash, Wabash County: Seven groceries were visited, and 6 were in good shape, while 1 was in fair condition, not being well lighted or ventilated. Baker's meat market was in excellent condition. Two others were found to be in good shape.

Walton, Cass County: The restaurant and grocery owned by M. Ruth was in excellent condition. Three meat markets were inspected; 2 were in good and 1 was in fair condition. One bakery and 1 restaurant were in good condition.

Washington, Daviess County: Twenty groceries were inspected. The meat markets and grocery stores owned by Cabel and Kauffman and H. F. Vollmer were in excellent condition. Mr. Vollmer has hide room in department store, renders lard, makes sausage, has poultry house in same building; there is no smell from any quarter;

the floors are cement, the drainage is good and scrubbing is done every night by a trained corps; 4 were good and 14 fair. Eleven meat markets and slaughter houses were visited; 2, above referred to, were excellent, 4 good and 5 fair. Ten drug stores were inspected; 9 were good and 1 was fair. Seven bakeries and confectioneries were inspected; Chas. H. Jones' candy kitchen was in excellent condition; 2 were good and 4 were fair. Four restaurants were visited; 3 were fair and 1 was poor, on account of general uncleanly conditions. One poultry house was visited and was ordered to be put in a sanitary condition.* One canning factory was in fair condition; no screens were provided.

West Baden, Orange County: Three groceries were visited, of which 2 were in good condition and 1 was in a fair condition, the back shop being dirty. One meat market was in good condition. Four drug stores were inspected; the West Baden Drug Company and the Pera Palace Drug Company were in excellent condition, 1 was in fair condition and 1 was in poor condition, being poorly ventilated and lighted and the cellar unclean. Nine hotels and restaurants were inspected. The new Hotel Sutton was in excellent condition. Three were in good condition, 3 fair and 2 poor, being unsanitary.

Whitestown, Boone County: Six groceries were inspected; 2 were good and 4 were in fair condition, having dirty back shops. Two meat markets were in good condition. One drug store was found to be in good condition and 1 restaurant was in fair condition, having unclean walls and ceilings but being badly ventilated and lighted.

Whiting, Lake County: Seven groceries were visited and 5 were found to be in good condition, while 2 were only in fair condition. Three meat markets and 1 drug store were in good condition. Two confectioneries and 1 bakery were visited. The confectioneries were in good condition, while the bakery was in poor condition, due to the dirty floor, walls and ceiling, table, bins and shelves. Two restaurants were inspected; 1 was good and 1 was poor.

Williamsport, Warren County: One dairy was inspected and found to be in poor condition. Orders were given to clean up, fix drain, etc. Five groceries were visited; 3 were good and 2 were fair. Five meat markets were inspected; 1 was good, 3 were fair, and 1 was bad. The garbage was not removed daily, 2 were unclean and two had foul refrigerators. Four drug stores were inspected; the one owned by A. B. Donovan was in excellent condition, 1 was good, 1 was fair and 1 was poor, the back store and back

yard were in bad shape, and the goods were not clean and up-to-date. Orders were left to put premises in a sanitary condition. Three bakeries were found to be in good sanitary condition. Of 6 restaurants visited, 2 were good and 4 were fair. In 1 the kitchen was not well lighted and ventilated, the shelves, tables, sinks, etc., were not clean, and in the other restaurants the garbage was not removed daily, the refrigerator was unclean and the employes were not neat.

Windfall, Tipton County: Four groceries were inspected. Two were found to be in good sanitary shape and 2 were fair, due to uncleanliness. One meat market was in good condition. Two drug stores were in good shape, except some patents were not properly labeled. Two bakeries were in good condition. Two restaurants were fairly clean, notice was given to clean up and paint. One canning factory was in good shape, notice was given to keep things clean.

Worthington, Greene County: Twenty first inspections and 12 second inspections were made. Of 13 groceries visited, that of Cooper & Hansford was in excellent condition, 6 were good and 6 were fair, the refrigerators, shelves and counters were unclean. Of 13 meat markets and slaughter houses, 5 were good, 5 were fair, having unclean meat blocks and refrigerators; 1 was poor and 2 were bad. The latter two slaughter houses were condemned and a satisfactory arrangement was made whereby all can use one good slaughter house. Five drug stores were inspected, that of Cooper & Son was found to be in excellent shape, 2 were good and 2 were fair, the goods not being clean and up-to-date. Two restaurants were visited and were found to be in fair condition.

Zionsville, Boone County: One restaurant and 1 drug store were in good condition. Two meat markets were in fair condition. Of 2 groceries inspected, 1 was good and 1 was fair, having a dirty refrigerator and back shop.

THE WATER SUPPLY OF INDIANA.

During the year ending October 31, 1907, 621 samples of water were analyzed; 221 samples were deep well waters, the waters coming from below an impervious strata; 257 samples were from shallow wells and were supposedly surface waters; 67 samples were stream supplies; 18 lakes or ponds; 23 springs and 18 cisterns. In addition to this work 12 sewage effluents were analyzed and three samples of distilled waters. Of the deep well supplies 141 were of good quality; 25 were so polluted as to be classed as bad, and 55 were of doubtful quality, that is, they contain certain chemical characteristics indicating pollution, but at the present time their condition is not so serious that they are unfit for use. Of the 257 shallow wells examined, 79 were of good quality; 134 unqualifiedly bad; 44 supplies were of doubtful quality. Since a shallow well water of doubtful quality is sure sooner or later to become more seriously polluted and pass into the class of bad waters, the doubtful and bad samples may be placed together. We find then that 178 or 69 per cent. of the well waters examined must be classed as unsatisfactory water for drinking and domestic purposes. Thirty-nine stream supplies were good; 9 bad and 21 doubtful. Twelve pond or lake supplies were examined and 6 were of doubtful quality. No waters of this class showed sufficient evidence of pollution to be classed as bad. Of the 23 spring supplies 11 were good; 5 bad and 7 doubtful. It is evident from the results obtained that many waters are classed as spring supplies when as a matter of fact they are but surface waters usually rising from some fault in the upper geological formations.

Another classification may be made of the work according to the ownership of the sources of supply. One hundred and two analyses were made from water from the public supplies classified as follows: 73 deep wells, 8 shallow wells, 51 river, 5 pond and 5 springs. Of the deep well supplies 39 were of good quality, none were bad and 34 were classed as doubtful. The large number of deep well waters classed as doubtful is explained by the fact that a series of analyses was made on water from the Noblesville deep wells and in every case the supply proved to be of doubtful quality. The deep well waters used as public supplies are, for the most part, of excellent

quality from a sanitary standpoint. The 8 shallow well waters examined were all Court House wells or wells near the street curb. Four were good, 3 doubtful and 1 bad. No shallow well should be used as a public supply. Of the 51 river supplies, 36 were of good quality, 9 doubtful and 6 bad. Many of these samples taken from the Ohio River in an unfiltered state, can never be classed as a good water. Of the private supplies 148 were deep wells, 249 shallow wells, 18 rivers, 13 ponds, 18 springs and 18 cistern waters. One hundred and two of the deep well waters were good, 21 doubtful and 25 bad. The deep well water is the safest source for the private supply and when the well is properly driven, carefully cased and located where no surface pollution can reach it, it is sure to supply a safe water. One hundred and thirty-three samples from shallow wells were bad, 41 doubtful and 75 good. The shallow well is never a safe source of water for drinking and domestic purposes except when located on an uninhabited area, and far removed from all sources of pollution. All shallow wells situated within town limits, or wherever the population is more congested than one family to the acre, cannot remain pure and wholesome. The study of the public water supplies of the State has been continued, and in the following report the chemical analyses of all public waters are tabulated, the results including those reported during the year 1906, as well as the figures obtained by more recent analyses.

ADAMS COUNTY.

There are no public supplies in this county. One private supply was found to be of fair quality.

ALLEN COUNTY.

Fort Wayne.—In 1879 this city built its own water supply, which comes from bored wells. The reservoir has a capacity of 3,000,000 gallons; 100 miles of distributing mains are in use and 3,500,000 gallons are used per day; 10,000 taps in city.

BARTHOLOMEW COUNTY.

Columbus.—The water system was built in 1870 by the city, and supply is taken from East Fork of White River below the junction of Flat Rock and Driftwood Fork. Gallery wells extend diagonally across the river. Sewage enters river just below the intake of the water supply. The supply is insufficient and must soon be increased. The water for drinking purposes is generally taken from

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF FT. WAYNE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
291	April 20, 1906.	None.	0.0	V. s.	V. s.	.0200	.0044	.0100	.0000	.70	33.0	30.0	14.0	.04
292	April 20, 1906.	None.	0.0	V. s.	V. s.	.0200	.0038	.0100	.0000	1.20	47.8	44.0	14.8	.035
337	May 17, 1906.	None.	0.0	Much.	S. reddish.	.0120	.0028	.0100	.0004	2.2	62.6	50.7	15.8	.04
588	Sept. 15, 1906.	None.	5—	V. s.	S. flocc.	.0000	.0080	.0000	.0005	3.6	68.8	54.8	26.4	.03
589	Sept. 15, 1906.	None.	0.0	None.	V. s.	.0044	.0060	.0000	.0003	3.6	69.0	54.3	27.2	.00
802	Nov. 27, 1906.	None.	0.0	V. s.	S. reddish.	.0110	.0000	.0000	.0000	1.2	47.2	35.4	27.4	.03
803	Dec. 1, 1906.	None.	0.0	Much.	Much.	.0250	.0040	.0000	.0000	5.6	73.6	57.4	28.4	.07
943	Mar. 30, 1907.	None.	0.0	V. s.	S. reddish.	.0130	.0044	.0100	.0080	3.9	64.0	51.4	30.2	.02
1059	July 3, 1907.	Sl.	0.0	None.	Con. reddish.	.0000	.0030	.0000	.0000	2.0	62.6	49.2	30.5	.01
1060	July 8, 1907.	None.	0.0	None.	Con. reddish.	.0120	.0068	.0000	.0001	1.0	43.4	34.0	28.2	.04
1162	Aug. 14, 1907.	None.	0.0	S.	S. reddish.	.0120	.0010	.0000	.0004	1.0	46.4	37.0	26.5	.04
1178	Aug. 16, 1907.	None.	1.9	M.	Con. reddish.	.0190	.0020	.0000	.0001	4.3	72.0	60.0	33.6	.10
1374	Nov. 6, 1907.	None.	4.0	High	Floc. iron.	.0350	.0126	.0150	.0000	3.35	65.0	56.0	29.0	.14
1375	Nov. 6, 1907.	None.	15.0	S.	Floc. iron.	.0120	.0086	.0150	.0008	1.30	50.8	44.8	36.4	.06

private wells. One analysis has been made of this supply, and the water found to contain no abnormal characteristics. Gas forming bacteria were present, a not unusual characteristic of river water. Seven private supplies were examined and six of these were not suitable for drinking purposes.

Elizabethtown.—No public supply. Four private supplies were examined, one of which was of fair quality, two were of doubtful character, and one was badly polluted.

Hope.—No public supply. Two private well waters were examined, neither of which were suitable for drinking purposes.

BENTON COUNTY.

Boswell.—Two town wells. Water from four private wells examined shows two to be badly polluted, and two to be of good quality.

Fowler.—Supply built for Fowler in 1895, but is now under private control. Four deep driven wells furnish the supply. Practically no private wells are in the town.

Oxford.—The public supply of three driven wells is leased by the town. One private supply was examined and was found to be a good water.

BLACKFORD COUNTY.

Hartford City.—The public supply was built in 1894 and is owned by the city. The water is obtained from seven driven wells, and the daily consumption of same is about 400,000 gallons.

BOONE COUNTY.

Jamestown.—No public supply. Two samples from private wells have been examined and found to be of fair quality.

Lebanon.—The water supply of this town was built in 1894 and is taken from deep wells. The water is pumped to a standpipe, and about 300,000 gallons per day are used. Water from one private well was found to be of good quality.

Thorntown.—No public supply. The one sample examined was found to be unfit for use.

Zionsville.—No public supply. Three well waters examined showed one to be good and two to be polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF HARTFORD CITY PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
1147	Aug. 10, 1907	None.	0.0	None.	None.	.0420	.0038	.0500	.0000	.....	99.8	74.0	31.0	.03
1148	Aug. 10, 1907	None.	0.0	Sl.	Con. reddish.	.....	.....	.....	.....	.....	81.4	59.0	21.3	.04
1149	Aug. 10, 1907	None.	0.0	Sl.	Con. reddish.	.....	.....	.....	.....	.....	102.0	84.0	27.8	.60
1150	Aug. 10, 1907	None.	0.0	Sl.	Con. reddish.	.....	.....	.....	.....	.....	102.8	80.0	31.4	.06
1151	Aug. 10, 1907	None.	0.0	None.	V. s.	.....	.....	.....	.....	.....	104.0	75.4	33.3	.03
1152	Aug. 10, 1907	None.	0.0	None.	V. s.	.0416	.0060	.0000	.0001	.....	109.6	82.6	30.8	.16
1171	Aug. 14, 1907	None.	0.0	Dec.	M. reddish.	.0270	.0020	.0000	.0044	.....	101.4	83.6	30.6	Trace.
1261	Sept. 11, 1907	None.	3.0	Much.	Sl. floe.	.0190	.0500	.0000	.0001	.....	100.4	80.2	31.0	.105
1262	Sept. 11, 1907	Oily.	4.0	V. much.	Much red.	.0260	.0040	.1000	.0000	.....	97.6	79.2	32.2	.20
1288	Sept. 19, 1907	None.	6.0	Much.	V. much red.	.0070	.0014	.0000	.0060	.....	102.4	86.0	32.7	.06
1289	Sept. 19, 1907	None.	4.0	Much.	M. red floe.	.0080	.0034	.0000	.0060	.....	98.6	82.6	32.8	.05
1290	Sept. 19, 1907	None.	6.0	Sl.	Much red.	.0050	.0030	.0050	.0100	.....	96.2	79.8	23.9	.024

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MONTPELIER PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
203	Feb. 5, 1906.....	Oily.....	0.0	V. mld.....	V. mch. red.....	.0040	.0080	.0010	.0000	23.9	101.2	90.8	15.6	.30
206	Feb. 12, 1906.....	Brimstone.....	0.0	V. s.....	S. earthy.....	.0040	.0060	.0150	.0010	21.9	108.8	91.5	15.6	.04
209	Feb. 19, 1906.....	S. earthy.....	0.0	S.....	Mch. reddish.....	.0060	.0054	.0000	Trace.	20.1	106.0	85.6	16.0	.14
217	Feb. 26, 1906.....	Natural gas.....	5 +	V. much.....	V. much black.....	.0120	.0044	.0050	.0008	20.9	99.5	80.0	11.2	.20
218	Feb. 26, 1906.....	V. s.....	5 —	Marked.....	V. much red.....	.0014	.0084	.0100	.0010	18.4	102.3	81.7	15.1	.30
256	April 3, 1906.....	Oily.....	5 —	V. mld.....	Earthy.....	.0010	.0114	.0400	.0004	13.8	83.5	70.4	12.8	.08
257	April 3, 1906.....	Like gas.....	5 —	V. mld, reddish.....	$\frac{1}{2}$ in black.....	.0240	.0048	.0200	.0008	20.5	105.0	86.8	4.8	.14
258	April 3, 1906.....	Oily or gassy.....	5 —	V. mld, reddish.....	$\frac{1}{2}$ in black.....	.0030	.0180	.0050	.0007	18.5	115.0	98.0	13.4	.04
301	April 30, 1906.....	Oily or gassy.....	0.0	Mkd.....	$\frac{2}{3}$ in black.....	.0040	.0048	.0200	.0020	18.0	87.2	75.2	9.0	.10
302	April 30, 1906.....	Oily or gassy.....	0.0	Mkd.....	$\frac{2}{3}$ in black.....	.0014	.0054	.0100	.0015	15.4	89.5	76.2	11.0	.14
354	May 26, 1906.....	Oily.....	0.0	V. s.....	Ex. reddish.....	.0012	.0028	.0050	.0007	14.4	101.4	80.7	16.2	.05
355	May 26, 1906.....	Musty.....	0.0	V. s.....	S.....	.0014	.0058	.0070	.0002	14.6	96.0	80.0	16.2	.03
356	May 26, 1906.....	S. earthy.....	0.0	V. s.....	Mch. reddish.....	.0080	.0038	.0010	.0010	14.3	96.4	80.0	15.1	.03
357	May 26, 1906.....	Earthy.....	0.0	S.....	Consid. earthy.....	.0160	.0028	.0060	.0008	14.5	94.2	75.0	13.8	.012

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LEBANON PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
359	May 26, 1906.....	Sl. foul.....	5 —	Slight.....	Exc. reddish floe...	.1300	.0128	.0100	.0000	.8	53.8	43.7	23.2	.90
385	June 18, 1906.....	Sl. foul.....	0.0	Sl. floe.....	Mch. reddish.....	.0560	.0164	.0000	.0220	1.2	65.2	52.1	.....	1.0

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT ZIONSVILLE.

Parts in 1000,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
197	Jan. 30, 1906.....	None.....	0.0	S.....	V. s.....	.0094	.0122	.0100	.0003	3.10	60.6	52.3	19.1	Trace.

BROWN COUNTY.

No public supplies.

CARROLL COUNTY.

Délphi.—This city owns its public water supply, which was built in 1902 and consists of water from three springs. The water is pumped to a standpipe and about 250,000 gallons are consumed daily. Water from two private supplies was examined and both found to be of good quality.

Pittsburg.—No public supply. Water from one well was analyzed and found to be of good quality.

CASS COUNTY.

Logansport.—In 1875 Logansport built its own water supply, which is taken from Eel River. There are also many private wells. Four of the private supplies which were examined were found to be as follows: Two badly polluted, one doubtful, and one fair.

CLARK COUNTY.

Borden.—No public supply. One sample analyzed was found to be of good quality.

Jeffersonville.—The Jeffersonville Water Supply Co. furnishes the supply for this city. It was built in 1887 and the water is taken from the Ohio River. About 1,000,000 gallons per day are used.

CLAY COUNTY.

Brazil.—The public supply is owned by the city and is taken from drilled wells. It is pumped into a reservoir and about 500,000 gallons per day are used. Fourteen private supplies have been examined. Of these five were polluted, five were of doubtful quality and four were suitable for drinking and domestic purposes.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LOGANSPOUT PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
416	July 18, 1906.....	V. slight.....	0.0	Much.....	Mkd. red.....	.0230	.0046	.0000	.0003	7.8	51.7	39.0	15.1	.10
418†	July 18, 1906.....	Sl. earthy.....	0.0	V. slight.....	Mch. earthy.....	.0118	.0150	.0500	.0002	.3	36.4	28.9	11.4	.0000

†Not the same as 416.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF JEFFERSONVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
413	July 18, 1906.....	Decidedly foul....	0.0	None.....	V. s. flocc.....	.0120	.0024	.3000	.0020	2.5	65.0	49.5	19.0	.02

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF BRAZIL PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard- ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
241	Mch. 26, 1906.	Slight.	0.0	None.	None.	.0128	.0080	.0300	.0006	3.0	54.0	46.4	10.8	.02
242	Mch. 26, 1906.	Sl. earthy.	5.0—	Slight.	Sl. earthy.	.0420	.0228	.0100	.0010	2.	61.3	51.6	3.2	Trace.
252	Mch. 31, 1906.	Earthy.	0.0	V. sl.	V. sl.	.0090	.0044	.0400	.0013	2.40	59.10	48.2	10.0	.00
253	Mch. 31, 1906.	None.	0.0	V. sl.	Sl.	.0270	.0054	.0300	.0010	1.80	48.10	40.6	7.6	Trace.
254	Mch. 31, 1906.	None.	0.0	V. sl.	V. sl.	.0290	.0046	.0200	.0080	1.80	61.30	49.3	10.4	.00
255	Mch. 31, 1906.	Veg.	5.0	Consid.	Cons. red.	.0028	.0038	.0000	.0002	2.70	72.80	57.1	10.2	.100
595	Sept. 18, 1906.	None.	0.0	Sl.	Cons. earthy.	.0000	.0024	.0200	.0000	4.6	82.0	62.0	25.4	.08
597	Sept. 18, 1906.	None.	0.0	V. sl.	V. sl. earthy.	.0136	.0034	.0100	.0020	4.6	82.6	60.3	25.3	.04
598	Sept. 18, 1906.	None.	0.0	V. sl.	V. sl.	.0130	.0068	.0100	.0015	4.5	80.9	60.3	25.2	.04
849	Jan. 16, 1907.	None.	0.0	None.	V. sl.	.0014	.0004	.1200	.0015	2.2	51.4	40.0	14.0	.00
1055	July 2, 1907.	None.	0.0	None.	V. sl.	.0010	.0194	.0000	.0001	3.7	70.0	54.6	36.0	.02
1057	July 2, 1907.	None.	0.0	None.	V. sl.	.0094	.0084	.0000	.0004	3.6	68.8	52.6	21.7	.02
1295	Sept. 20, 1907.	Sl. foul.	6.0	Much.	None.	.0036	.0020	.0050	.0000	4.9	73.6	64.6	20.6	.016

CLINTON COUNTY.

Edna Mills.—No public supply. One private supply examined was found to be of good quality.

Frankfort.—The Frankfort Water Works Co. supplies this city with water from driven wells. The reservoir is filled by direct pressure and holds 300,000 gallons. The daily consumption is about 1,000,000 gallons. Water from a private well examined was found to be of fair quality.

Kirklin.—No water supply. Water from seven private wells has been analyzed and of this number four were of good quality, and three were polluted.

Rossville.—No public supply. Three private supplies examined showed one to be good and two to be of poor quality.

CRAWFORD COUNTY.

English.—The English Water Co. was built in 1895. The supply is taken from three springs, and about 1,500 gallons per day are used.

Leavenworth.—The Leavenworth Water Co. gets its supply from a bored well; the water is then pumped into a reservoir. The plant was established in 1896. About 2,700 gallons are used daily.

Marengo.—A company was established here in 1904 by the Grant & Davis Water Co. The supply is from a spring, and is pumped into a reservoir. About 6,000 gallons daily are consumed.

DAVIESS COUNTY.

Elnora.—No public supply. Water analyzed from two private supplies was found to be of doubtful quality.

Montgomery.—Two public and private wells are the supply for this town.

Washington.—The City Water Co., established in 1887 by C. Gray, supplies this town. The water is pumped from a stream to a standpipe and about 1,500,000 gallons per day are used. Two private supplies were examined; one was found to be unsuitable for drinking purposes, and the other was of poor quality.

DEARBORN COUNTY.

Aurora.—A private company built in 1904 furnishes this city with its supply. The water is pumped from the Ohio River into a reservoir. The water is purified by filtration. About 150,000 gallons per day are used.

Lawrenceburg.—Driven wells are the only public supply in this town.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF GREENSBURG PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.	Total.	Fixed.		
103*	Nov. 10, 1905.	Sl. foul.	30.	Slight.	V. much floe.	.0218	.0220	.0150	.0002	83.1	70.4	.....	.2000
204	Feb. 12, 1906.	None.	0.0	None.	M'kd. earthy.	.0065	.0074	.0200	.0010	29.2	22.5	11.5	Trace.

*Not same as 204.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF JASPER PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.	Total.	Fixed.		
421	July 18, 1906.	V. slight.	0.0	None.	Sl. earthy.	.0044	.0060	.0000	.0180	34.4	27.0	14.0	Trace.
422	July 18, 1906.	Sl. foul.	0.0	Slight.	Sl. earthy.	.0034	.0138	.0500	.0000	13.0	10.6	4.1	Trace.

DECATUR COUNTY.

Burney.—No public supply. Five private supplies were examined. Two were suitable for drinking purpose, and three were polluted.

Clarksburg.—No public supply. One private supply was examined and found to be badly polluted.

Greensburg.—The Greensburg Water Company, a private concern, supplies this town with its water, being established in 1889. The water is pumped direct from bored wells. About 400,000 gallons per day are used. One private supply was examined and found to be of very poor quality.

Letts.—No public supply. Water from one private well examined was found to be suitable for drinking.

New Point.—No public supply. One water examined was found to be of poor quality.

Sardinia.—No public supply. Four waters examined were all found to be potable.

St. Paul.—No public supply. Two private supplies examined were both badly polluted.

DEKALB COUNTY.

Auburn.—The supply for this city was built in 1898. The water is pumped from drilled wells direct into the mains. About 600,000 gallons daily are consumed. Three private supplies were examined and all were found to be of good quality.

Garrett.—In 1896 this city built its own water plant and gets its supply from bored wells. The water is pumped direct into the mains.

Waterloo.—The Waterloo Water and Light Company was built in 1902, the water being pumped from drilled wells into a reservoir. About 20,000 gallons are used per day.

DELAWARE COUNTY.

Albany.—The Albany Water and Light Company, using a system of drilled wells, supplies this city. The water is supplied by direct pressure.

Muncie.—The Muncie Water Works Company, a private concern, supplies this city. The water is taken from deep wells and White River and Buck Creek. About 3,500,000 gallons daily are used. The water from White River has an unpleasant taste of salt and oil. One analysis of this water has been made, and at that time, Septem-

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF ELKHART PUBLIC SUPPLY
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
215	Feb. 26, 1906.	Sl. earthy.	5.—	None.	None.	.0050	.0164	.1000	.0010	.4	23.7	19.6	9.9	Trace.
225	Mar. 10, 1906.	None.	0.0	None.	V. sl. earthy.	.0038	.0188	.0300	.0017	.3	24.5	20.2	9.5	Trace.
276	April 16, 1906.	Earthy.	.5	V. slight.	Sl. reddish.	.0010	.0054	.0100	.0015	.4	27.0	22.6	9.2	.04

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF GOSHEN PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
472	Aug. 11, 1906.	V. sl. earthy.	0.0	Slight.	Consid. earthy.	.0004	.0088	.0400	.0040	.4	32.6	29.1	22.3	.015
473	Aug. 11, 1906.	Sl. earthy.	0.0	Slight.	Much earthy.	.0050	.0080	.0700	.0120	.2	31.1	25.5	21.1	.017

ber 16, 1907, the water was found to be potable. Samples from four private supplies were examined, three of which were found to be satisfactory and one was of poor quality.

Selma.—No public supply. One sample analyzed from a private well was found to be of fair quality.

Yorktown.—No public supply. Four private supplies were examined and from factors determined two were polluted and one was fair. Owing to smallness of samples, a satisfactory examination could not be made.

DUBOIS COUNTY.

Huntingburg.—A public supply was established by this city in 1893, which obtains the water from a pond covering 20 acres. The water is pumped to a standpipe, and about 170,000 gallons per day are used.

Jasper.—This town gets its water supply from the Patoka River. It is pumped into a reservoir.

ELKHART COUNTY.

Elkhart.—The Elkhart Water Company, a corporation mainly owned by Chicago capitalists, was built in 1884. The supply is from dug wells. About two-thirds of the population use this supply.

Goshen.—Goshen built its water supply in 1880. The water is pumped from wells to a standpipe, and about 3,000,000 gallons per day are used. Four private supplies examined proved to be potable.

New Paris.—No public supply. One private supply examined was of good quality.

Nappanee.—This town owns a bored well, the water from which is pumped into a tank. About 200,000 gallons per day are used.

FAYETTE COUNTY.

Connersville.—This city has a supply which was built in 1869. The water comes through a hydraulic canal fed by the west fork of Whitewater River, and is pumped from the canal into the mains. About 1,000,000 gallons per day are used. Ten private supplies have been examined. Eight of these waters were of good quality, and two were unsuitable for drinking purposes.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF CONNERSVILLE PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
90	Nov. 2, 1905.....	S. earthy.....	.1	None.....	S.....	.0010	.0080	.1500	.0006	.20	35.4	27.2	.....	.048
89	Nov. 2, 1905.....	S. earthy.....	.1	None.....	S.....	.0026	.0086	.1200	.0010	.30	35.5	26.9	.....	.00
1052	July 1, 1907.....	S. earthy.....	0.0	V. S. +	S. floe.....	.0040	.0094	.0700	.0010	.2	33.6	24.6	24.5	Trace.
1054	July 1, 1907.....	None.....	0.0	V. S.....	S.....	.0000	.0060	.0100	.0004	1.2	53.0	40.4	33.3	.0040
1067	July 2, 1907.....	None.....	0.0	None.....	None.....	.0014	.0124	.1500	.0004	.3	33.2	24.0	24.5	.0000

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF COVINGTON PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
208	Feb. 19, 1906.....	None.....	0.0	None.....	V. s.....	.0034	.0054	1.2	.00034	3.30	66.6	47.3	14.1	Trace

FLOYD COUNTY.

Georgetown.—Four dug wells supply this town with its water. About 50 per cent. of the population use this supply. One private supply examined was found to be of satisfactory quality.

New Albany.—The water supply of this city is owned by a corporation. The water is pumped from the Ohio River into a system of reservoirs through which it is filtered. Four private supplies examined show three to be badly polluted and one of fair quality.

FOUNTAIN COUNTY.

Attica.—Attica rebuilt her public water supply in 1889. The supply is from bored wells and is pumped to a covered reservoir. The average daily consumption is 275,000 gallons. But few private wells are used. One private supply examined was found to be of good quality.

Covington.—In 1893 the Covington Light and Water Company, a corporation, built the water supply of this town. The water is from two springs which are fed by large streams. The water is pumped to a standpipe and about 50,000 gallons per day are used.

Hillsboro.—No public supply. Four private supplies have been analyzed and two were found to be badly polluted, one was hardly suitable for drinking purposes, and one of fair quality.

Veedersburg.—This town owns a system of two bored wells. The water is pumped to a standpipe holding 90,000 gallons.

FRANKLIN COUNTY.

Brookville.—Brookville owns its own public supply, built in 1891, and which gets the water from a stream. This is pumped to a reservoir. This water is not used for drinking and domestic purposes, cistern water being used for that purpose.

Oldenberg.—No public supply. Analyses of two private supplies showed one to be badly polluted and the other to be a good water.

FULTON COUNTY.

Rochester.—Supply built in 1893 and owned by town. The water is taken from a lake and pumped to a standpipe. About 400,000 gallons daily are used. It is not used for drinking purposes, each family using water from private wells for that. Four private supplies examined showed three to be of good quality, and one to be unfit for drinking purposes on account of large quantities of salt present.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF ROCHESTER CITY PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
443	July 31, 1906.	Earthy.	5+	V. s.	S.	.0020	.0324	.0100	.0003	.3		19.2	12.7	8.6	Trace.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF FAIRMOUNT PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
599	Sept. 20, 1906.	None.	0.0	V. s.	V. s.	.0050	.0124	.0700	.0010	15.0	107.0	76.9	32.1	0.0
601	Sept. 20, 1906.	V. s.	0.0	V. s.	S.	.0500	.0028	.0700	.0003	11.8	64.2	38.2	32.8	.03
602	Sept. 20, 1906.	None.	0.0	V. s.	V. s.	.0054	.0126	.0700	.0008	15.5	84.1	62.7	31.9	0.0

GIBSON COUNTY.

Oakland City.—In 1903 a private stock company built the water system for this city. The water is taken from a pond and pumped to a standpipe having a capacity of 60,000 gallons. About 50,000 gallons per day are consumed. One private supply examined was found to be badly polluted.

Princeton.—A private company, the Princeton Water and Light Company, was built in 1893. The water is taken from the Patoka River. A standpipe with a capacity of 120,000 gallons is used. About 30 per cent. of the people use this supply, the rest using water from private wells.

GRANT COUNTY.

Fairmount.—This town owns its own supply which was built in 1894. Six artesian wells constitute the supply, the water from which is pumped by suction and forced through the mains by pressure. There are also many wells in the town.

Gas City.—Gas City owns its own water supply, which was built in 1898. The water is pumped from bored wells into a reservoir. There are also many private wells.

Marion.—Marion owns a number of deep bored wells from which its supply is taken. Reservoirs are used. About 1,500,000 gallons per day are used. Water from one well is of medicinal character. Five private supplies have been examined. Three were suitable for drinking, one was badly polluted and one was of doubtful character.

Upland.—A private corporation furnishes Upland with its water supply, the works being built in 1892. Water from a drilled well is pumped direct into the mains by a force pump. Private wells are also used.

GREENE COUNTY.

Bloomfield.—The Home Light and Water Company, built in 1904, supplies Bloomfield with its water. Water from deep bored wells is pumped to a standpipe. Thirty thousand gallons per day are consumed. Water from one private supply examined was found to be of good quality, although an excess of iron was present.

Linton.—A private company, built in 1902, furnishes the supply for this city. Six bored wells are used and the water is forced into the mains by direct pressure. An average of 300,000 gallons per day are consumed. One private supply examined was found to be polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MARION PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.			Total.	Fixed.		
1029	June 20, 1907	V. sl. oily	2.0	Sl	Sl	.0004	.0020	.0000	.0000	6.90		63.0	41.4	32.9	.0480

CHEMICAL ANALYSIS OF WATER FROM LINTON PUBLIC SUPPLY.

Parts per 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
1088	July 9, 1907	None	0.0	None	None	.0014	.0110	.0200	.0004	.80	36.4	30.0	29.1	.01
1181	Aug. 16, 1907	None	0.0	None	Con. brown.	.0040	.0084	.0300	.0010	.60	34.2	31.4	26.2	.02
1251	Sept. 9, 1907	None	2.0	None	V. s.	.0004	.0008	.0050	.0000	.90	42.8	35.4	27.8	.012
1332	Sept. 27, 1907	None	0.0	Much	Floc.	.0330	.0018	.0000	.0100	.80	36.8	24.8	24.4	.04
1351	Oct. 24, 1907	None	4.0	Sl	Floc.	.0014	.0020	.0100	.0008	1.00	39.2	31.2	25.7	.02

Lyons.—No public supply. Two private supplies examined were found to be unsuitable for drinking purposes, as they were heavily mineralized.

Newark.—No public supply. One private supply was found to be of poor quality.

Worthington.—A private concern built in 1897, furnishes the water supply for this town. The water is from bored wells and is pumped to a standpipe. One private supply was found to be of good quality.

HAMILTON COUNTY.

Arcadia.—No public supply. Five examinations of private supplies have been made; one was heavily polluted, three were found to be receiving sewage and one was a good supply.

Carmel.—No public supply. One private supply was examined and found to be unfit for drinking purposes.

Noblesville.—The Noblesville Water and Light Company, a private company, built in 1891 and 1892, gets the supply from driven wells. The water is pumped into a reservoir and about 400,000 gallons per day are used. Fifteen private supplies have been examined, ten of which were only of fair quality, two very heavily polluted and three were suitable for drinking and domestic purposes.

A SPECIAL INVESTIGATION OF NOBLESVILLE WATER SUPPLY.

For several years past the character of the Noblesville water supply has been under suspicion. That the suspicion has been well founded is shown by the fact that at certain times every year mild epidemics of gastro-intestinal disorders simulating typhoid fever have appeared. While the persons affected generally recovered in the course of a few days, yet the large number of cases occurring at the same time led to the conclusion that the trouble must be with the water supply. As frequent chemical analyses have shown the water to be of unsatisfactory quality, and in response to a request from the City Board of Health, during the month of June a careful study of the supply was undertaken, and the following report rendered:

REPORT ON THE NOBLESVILLE WATER SUPPLY.

The water supplied to the consumers of the Noblesville Water Company is derived from two sources, one a series of driven wells 50 feet deep which draw on a vein of water in gravel underlying hard pan, and the other two wells 275 feet deep which are drilled into the limestone. The shallow wells are driven in the bottom of two brick walled wells so con-

nected as to be practically one reservoir and flow wherever the water level is sufficiently low in the wells. The water from the deep wells is raised by an air lift and pumped into the reservoirs which contain the flowing wells. The mixed water is taken from the reservoirs by the pumps and distributed by direct pressure. The reservoirs have a united capacity of 50,000 gallons and are located on the bank of White river, 30 feet from low-water mark and at the lowest side of the drainage area for a portion of the city. The reservoirs are brick walled and roofed, and at present are level with the ground, which is, however, largely made land. They are 25 feet deep and the wells are driven 25 feet below the bottom of the reservoirs. The bed of White river is practically on a level with the bottom of the reservoirs, and when the river is high the water comes nearly up to the top of the reservoir and is separated from it by a bank of earth but a few feet in thickness. The Wayne street sewer, composed of loosely-jointed sewer pipe, passes within 30 feet of the reservoir and its outlet is 70 feet away. At this point a pool of sewage, filled with undecomposed and partially decomposed fecal matter, is constantly standing. This pool of sewage is fifteen feet from the river at low-water mark and about ten feet above the bottom of the river. The surface drain of Wayne street is fifty feet from the reservoir. It is the practice of the engineers at the pumping station to rely on the supply from the shallow wells as far as possible, but through the summer season this supply is inadequate and it becomes necessary to use the air lift on the deep limestone wells for a portion of each day.

The character of the water in the deep wells is distinctly different from that taken from the shallow wells, and consequently the composition of the water in the reservoirs varies according to the proportion of each water present.

COMPARATIVE COMPOSITION OF WATER FROM THE DEEP WELLS, SHALLOW WELLS AND WHITE RIVER.

As is commonly the case with deep well waters, the free ammonia content is high and the nitrate content low. The solid content is lower than that of the mixed water in the reservoirs and the hardness is practically the same. The chlorine content is somewhat higher than that of the mixed water. Two samples of river water, one taken one and one-half miles above the pumping station, show a decidedly different composition from the deep well water, in that the solid contents are higher, the chlorine content much higher and the nitrate and nitrite contents also higher than in the deep well water. It is apparent that the water in the deep wells is derived from a vein entirely protected against seepage from the river.

Water taken from a second deep well belonging to private parties was almost identical in comparison with water from the deep wells of the Water Works Company and undoubtedly came from the same vein. In order to determine the normal composition of water from shallow wells located on the watershed supplying the shallow wells of the water company, four analyses of water from driven wells have been made. In every case nitrates and nitrites were present, and in other respects the

waters were all similar in composition and in character and were evidently drawn from the same vein as that tapped by the shallow wells of the water company.

CHARACTER OF THE PUBLIC SUPPLY.

Because of the fact that the water delivered at the taps and stored in the reservoir is a mixture of two supplies of entirely different character, and the more because the mixture is never constant in its proportions, the analytical data obtained on samples of the public supply is not as concordant as might be desired. There is, however, a relatively constant composition and the results are uniform in showing departures from the normal. Twenty-eight analyses have been made of water taken from private taps or from the reservoir during the past year. The results uniformly show high nitrates and nitrites, two factors that do not appear in the waters from the deep wells, or at most are found only in small quantities. These factors must therefore be derived from the shallow well water. The factor most constant has been the hardness, which has usually stood between 27 and 30, in but four cases being outside these limits. This is due to the fact that the deep and shallow well waters are of the same hardness.

A presumptive test has been made for the bacilli coli communis in all of the samples. This test determines the presence of bacteria of the same type as the colon bacilli more than it identifies this particular specie. The presumptive test is very valuable when negative results are obtained, since it shows the absence of all bacilli of the colon type. With the exception of a sample collected on the 6th of February, 1907, all samples collected between June, 1906, and April 24, 1907, were free from bacilli of the colon type, but beginning with April 24th, the presumptive test has shown *B. Coli*, or closely related forms, to be present in 11 out of 15 samples. These determinations have been made on tap samples rather than on samples taken directly from the reservoir. Since the *B. Coli* are frequently present in reservoir waters, but disappear in the supply pipes, the results are the more conclusive as showing the presence of *B. Coli* in the water.

Water taken from the stratum tapped by the shallow wells of the water company when in a normal condition, that is, when taken from a drainage area free from inhabitants and unaffected by farming or manufacturing operations, should not show the presence of nitrates or nitrites and should have a chlorine content below 1.0. Such a water would be considered a pure supply. A water might contain nitrates in considerable quantities and have a high chlorine content, and still be safe for drinking and domestic purposes, because whatever impurities had been deposited on the water shed had been fully oxidized and removed by natural filtration before reaching the water-bearing stratum. None of the chemical contents are of themselves injurious. They are but indexes of pollution, and as they vary they mark either an increase or decrease in the amount of polluting material or a change in the efficiency of the ground, which, acting as a filter, removes injurious bacteria and undecomposed organic matter, either by holding them back or destroying them by oxidation and nitrification.

The fact that a series of analyses, extending over a year, shows in every instance the presence of nitrates, nitrites and a chlorine content above the normal, and, moreover, that for the last four months the bacilli of the colon type have been present in 73 per cent. of the samples, is sufficient indication of abnormal conditions. The nitrate and nitrite contents of this supply are not constant, but vary from day to day, apparently independently of the increase or decrease in the proportioning of deep well water present. Water analysts accept the fact that "a state of change is a state of danger." If this criterion is applied to this water, it indicates an unsatisfactory condition. Whether or not the water supply is a "safe" water, or is to be classed as "doubtful" or "dangerous," depends entirely on the character of the material that is responsible for the unusual composition.

It becomes necessary to explain, if possible, the presence of the abnormal chemical constituents and bacteria before a true value can be placed upon the water:

The wells are, as has been shown, in the same stratum as the 30-foot driven wells on the same water shed. These wells, while not seriously polluted, do not furnish normal water and are evidently fed by rain water which falls upon the thickly-settled drainage area and filters downward to the water-bearing stratum, carrying with it all soluble impurities which may be present upon the surface. Since this drainage area is underlaid by gravel beds of excellent quality, it is probable that water in the 30-foot stratum is free from dangerous contamination and would continue to remain so if all privies, open vaults and cesspools upon the drainage were abandoned and sewer connections maintained by every householder. The impossibility of obtaining this condition leaves the water in this stratum in constant danger of receiving a load of inefficiently oxidized and purified sewage.

As before stated, two sewers empty their contents within 70 feet of the reservoir, and pools of human excreta stand upon the surface to pollute the air with stench and the underlying ground for yards around.

Dr. Vaughan, reporting upon the pollution of the ground by privies, said:

"In order to ascertain to what extent soil was contaminated by privy-vaults, I dug down near a privy-vault which was situated on the outskirts of the town and isolated, so that there were no other known sources of contamination around; I dug down a foot behind this privy-vault and took up some soil three feet below the surface to determine the amount of organic matter in it; then I went off six feet and did the same thing, then 12, then 18, then 24, then 30; and, without going into detail, suffice it to say that the contamination of the soil from that single privy, built upon nearly level ground, could be detected 50 feet from the vault plainly."

There is abundant evidence to show that sewage and sewage bacteria will permeate the ground for many yards, and more rapidly if water is pumped from the drainage area and the water level so lowered around the well. When these well-known facts are considered in connection with the location of the wells and reservoirs of the water company, the evidence that the abnormal composition of the water is due to infiltration from the sewers becomes convincing.

CONCLUSIONS.

The public water supply of Noblesville is derived from deep and shallow wells. The deep wells supply potable water and are in no danger of contamination; the shallow wells are fed by the run-off of a thickly-populated area and the water is constantly receiving pollution, both from surface water, which percolates downward to the water-bearing stratum, and from sewers and sewer outlets located near the wells.

The pollution is not extensive and the bacterial content of the water is usually low. This is due to the protection afforded by the excellent gravel beds which lie above the water-bearing stratum, and which, acting as natural filters, remove nearly all the bacteria and organic matter. The efficiency of this natural filter may become impaired at any time, either by an increase in the amount of sewage deposited on the drainage area, or the formation of channels, through which the sewage would have uninterrupted flow. This latter condition had already obtained within the last six months, according to the statements of the engineer of the water works.

Every sanitary engineer will hold that water for public consumption must be above suspicion. That this condition is not true of the supply under consideration is abundantly shown.

HANCOCK COUNTY.

Greenfield.—The supply of this town is from driven wells; 200,000 gallons per day are used.

Carrollton.—No public supply. One private supply examined was badly polluted.

Fortville.—No public supply. One well water analyzed was badly polluted.

Gem.—No public supply. Water from one shallow well was examined and found to be unfit for use.

Shirley.—No public supply. One private supply was examined and found to be of good quality.

HARRISON COUNTY.

Corydon.—Two public supplies furnish Corydon with its water supply. The town has a spring, and a private company built in 1903 gets its water from the creek and pumps it into a reservoir. One private supply analyzed was found to be unfit for drinking purposes.

New Amsterdam.—No public supply. Water from the spring owned by the town and a public well were both of good quality. Water from a private well was of good quality.

New Middletown.—No public supply. Five private supplies were examined. Three were of doubtful quality, one was badly polluted and one was not considered safe for drinking purposes.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF NOBLESVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
248	Mar. 30, 1906	None	0.0	V. s.	V. s.	.0046	.0018	.0300	.0006	1.6	37.5	30.0	15.0	.02
249	Mar. 30, 1906	None	0.0	None	V. s.	.0050	.0020	.0500	.0005	1.6	47.5	36.6	14.9	.00
275	April 16, 1906	None	5.—	None	None	.0020	.0028	.1200	.0000	1.2	43.6	35.6	16.4	.01
391	June 18, 1906	None	0.0	None	V. s.	.0070	.0016	.1000	.0003	1.10	43.7	31.5	14.8	.00
395	June 25, 1906	V. sl. earthy.	0.0	Sl.	Mkd. brown.	.0010	.0034	.1000	.0000	1.2	49.2	35.0	14.6	.10
794	Nov. 27, 1906	None	0.0	None	None	.0010	.0014	.2000	.0006	2.0	40.0	30.0	26.5	.00
795	Nov. 27, 1906	None	0.0	None	None	.0010	.0014	.1500	.0000	1.8	41.4	30.0	26.5	.00
856	Jan. 23, 1907	V. sl.	0.0	V. sl.	Sl. whitish.	.0020	.0010	.1200	.0008	1.4	38.6	30.6	27.3	.02
862	Jan. 23, 1907	None	0.0	None	None	.0010	.0000	.0500	.0060	1.4	58.0	31.6	26.7	.00
874	Jan. 31, 1907	None	0.0	V. sl.	M. flor.	.0170	.0004	.0050	.0003	2.4	41.2	30.0	28.0	.12
881	Feb. 9, 1907	None	0.0	None	V. sl.	.0010	.0004	.1000	.0008	1.2	37.0	30.0	26.7	.01
882	Feb. 9, 1907	None	0.0	None	None	.0010	.0006	.1200	.0006	1.6	40.0	31.0	27.0	.01
883	Feb. 9, 1907	None	0.0	None	V. sl.	.0014	.0004	.2000	.0006	1.8	41.0	32.0	26.8	.01
885	Feb. 9, 1907	None	0.0	None	V. sl.	.0004	.0000	.0700	.0006	1.4	38.0	32.0	26.3	.00
902	Feb. 16, 1907	V. sl.	0.0	V. sl.	V. s.	.0120	.0000	.1000	.0003	2.2	40.0	30.0	26.6	.04
934	Mar. 23, 1907	None	0.0	None	V. sl.	.0010	.0016	.1500	.0015	2.0	44.6	33.6	29.3	.00
935	Mar. 23, 1907	V. sl.	0.0	None	V. sl.	.0004	.0064	.2000	.0012	2.4	41.4	34.6	29.5	.00

980	April 27, 1907	V. sl.	0.0	None.	None.	.0010	.1200	.0003	2.7	44.6	28.0	26.2	.02
981	April 27, 1907	V. sl.	0.0	V. sl.	V. sl.	.0070	.0400	.0010	2.2	42.4	26.0	26.2	.05
1083	July 13, 1907	None.	0.0	None.	Sl.	.0054	.0200	.0010	1.5	55.2	39.4	31.7	.14
1101	July 20, 1907	Sl. foul.	0.0	Sl.	Sl.	.0194	.0150	.0006	1.9	42.8	32.4	28.1	.024
1126	Aug. 2, 1907	Sl. foul.	0.0	V. sl.	V. sl. red.	.0050	.0500	.0005	2.0	44.7	33.8	29.0	.02
1134	Aug. 2, 1907	None.	0.0	V. sl.	V. sl.	.0044	.0700	.0015	1.7	55.6	42.4	29.0	.10
1138	Aug. 2, 1907	None.	0.0	None.	None.	.0010	.1500	.0009	1.4	54.4	39.6	28.2	.07
1142	Aug. 3, 1907	None.	0.0	None.	V. s.	.0014	.0300	.0003	1.4	46.2	39.2	30.4	.00
1145	Aug. 3, 1907	None.	0.0	None.	None.	.0016	.2000	.0010	1.5	46.2	38.4	37.0	.02
1155	Aug. 12, 1907	Sl. foul.	0.0	None.	None.	.0014	.2000	.0040	1.7	53.0	34.0	24.6	.03
1166	Aug. 14, 1907	None.	0.0	None.	None.	.0004	.0700	.0010	1.2	46.2	36.6	28.1	.02
1175	Aug. 14, 1907	None.	0.0	None.	V. sl.	.0034	.0700	.0010	1.6	42.6	34.8	36.3	.03
1203	Aug. 20, 1907	Dec. foul.	0.0	None.	None.	.0024	.1000	.0010	1.2	50.8	33.0	28.5	.0004
1205	Aug. 20, 1907	Sl.	0.0	Sl.	None.	.0004	.0700	.001	1.9	48.8	33.4	31.4	.0240
1208	Aug. 22, 1907	None.	0.0	None.	Sl.	.0040	.1500	.0014	1.3	44.8	36.8	28.5	.08
1222	Aug. 27, 1907	None.	0.0	None.	None.	.0010	.0800	.0020	1.3	54.4	39.8	30.6	.02
1316	Sept. 26, 1907	None.	4.0	Sl.	V. s.	.0054	.0700	.0016	1.5	40.8	26.2	26.0	.04
1335	Oct. 3, 1907	None.	0.0	None.	Sl. floe.	.0010	.2500	.0008	1.5	44.0	30.8	30.1	.001

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELLS AT WESTFIELD.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
172	Jan. 3, 1906.	None.	5. —	V. s.	Mch. reddish.	.0000	.0010	.2500	.0012	26.8	126.0	92.6	25.9	.0332
173	Jan. 3, 1906.	S. earthy.	0.0	None.	V. much floc.	.0364	.0048	.8000	.0012	1.4	47.4	40.0	22.6	.0163

172. Location unknown. 173. Edge of sidewalk.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF NEW MIDDLETOWN PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
727	Oct. 29, 1906.	None.	0.0	Marked.	Mkd. earthy.	.0004	.0088	.8000	.0003	2.0	58.5	47.0	34.8	.02

HENDRICKS COUNTY.

Avon.—No public supply. One private supply examined found to be unfit for use.

Bridgeport.—No public supply. One private well water found to be heavily mineralized.

Brownsburg.—No public supply. Water analyzed from one shallow well was found to be badly polluted.

Cartersburg.—No public supply. One sample from a private supply was found to be very unsatisfactory.

Clayton.—No public supply. Three private supplies were examined; one was a very good water, one of fair quality, and the other unfit for use.

Coatsville.—No public supply. One private supply was examined and found to be undesirable for drinking purposes.

Plainfield.—No public supply. Two samples analyzed from wells proved to be of good quality.

HENRY COUNTY.

Knightstown.—A system of bored wells built in 1894 furnishes this town with its water supply. Water is pumped direct in daytime, but a standpipe is used at night; 60,000 gallons per day are used.

New Castle. A system of deep drilled wells were built by this city in 1889. This is pumped to two reservoirs, and 750,000 gallons daily are consumed.

Middletown. Three artesian wells bored in 1896 by the town furnish the public water supply. The wells are 86 feet deep.

Shirley.—No public supply. One private supply examined was of doubtful character.

HOWARD COUNTY.

Greentown.—A private plant has recently been installed in this town. The water is from a drilled well and is pumped into a covered reservoir. There are also many private drilled wells.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF NEW CASTLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
485	Aug. 15, 1906.....	None.....	0.0	Slight.....	Slight.....	.0006	.0054	.0500	.0002	.7	41.4	32.7	33.3	.04

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF BROWNSTOWN PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
411	July 18, 1906.....	S. foul.....	0.0	None.....	None.....	.0010	.0050	.1500	.0010	3.10	68.0	49.5	20.0	.00

HUNTINGTON COUNTY.

Huntington.—This city owns a system of drilled wells which were established in 1890. The water from these wells is pumped to a standpipe, and about 1,000,000 gallons per day are used. One private supply has been examined and the water found to be of good quality.

Roanoke.—No public supply. The water from three private wells was analyzed, and two found to be of good quality, and one unfit for use.

JACKSON COUNTY.

Brownstown.—The supply for this town was built in 1898, and consists of one dug well with a capacity of 400 gallons per minute. The water is pumped into a reservoir.

Crothersville.—No public supply. One well water analyzed was found to be of good quality.

Seymour.—The Seymour Water Co., a private company, built its plant in 1889. The water is taken from the east fork of White river and pumped to a standpipe. A filtration plant is in use, and about 1,000,000 gallons per day are consumed. One private supply examined was found to be suitable for use.

JASPER COUNTY.

Remington.—This town owns its supply, which was built in 1897 and consists of bored wells. The water is pumped to a reservoir. One sample from a private supply was found to be heavily polluted.

Rensselaer.—This supply was built in 1897 and is owned by the city. The supply consists of a drilled well, the water from which is pumped to a tank. An average of 300,000 gallons per day is used.

JAY COUNTY.

Dunkirk.—A system of four driven wells, built in 1894, supplies Dunkirk. The water from these wells is pumped to a reservoir.

Portland.—A system of artesian wells, built in 1890, is owned by the city. Three hundred thousand gallons per day are used.

Redkey.—No public supply. Two private supplies were examined. One was found to be a good water, and the other was badly polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF HUNTINGTON PUBLIC SUPPLY
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid	Nitrates	Nitrites.		Total.	Fixed.		
340	May 17, 1906	None.....	5 —	V. s.....	Mch. reddish.....	.0004	.0026	.0500	.0000	1.8	44.0	35.9	16.6	.035
346	May 21, 1906	None.....	0.0	V. s.....	S. earthy.....	.0034	.0040	.0300	.0040	2.4	44.3	36.4	15.2	.02
349	May 24, 1906	S. veg.....	0.0	None.....	S. reddish.....	.0004	.0076	.0300	.0000	2.2	47.4	37.8	16.1	.001
360	May 26, 1906	V. s., foul.....	0.0	None.....	None.....	.0002	.0010	.0300	.0020	2.9	46.4	35.6	16.4	.024
366	May 28, 1906	Earthy.....	0.0	V. s.....	Mch. reddish.....	.0014	.0038	.6600	.0010	1.8	43.3	37.6	15.6	.05
698*	Oct. 22, 1906	V. s.....	0.0	S.....	S. reddish.....	.1050	.0020	.0000	.0010	18.8	75.7	57.8	28.5	.10

*Not the same supply as other samples.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MADISON PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard- ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
288	April 21, 1906.....	None.....	0.0	V. s.....	S. red.....	.0204	.0058	.3000	.0080	14.00	133.2	103.0	27.0	.03
289	April 21, 1906.....	Earthy.....	—	Mkd.....	Mch. clay.....	.0022	.0096	.0500	Trace.	.80	17.1	14.3	2.8	.04
290	April 21, 1906.....	None.....	0.0	V. s.....	Mch. red.....	.0310	.0048	1.000	.0040	8.5	131.8	104.6	27.2	.04
326	May 12, 1906.....	Earthy.....	Mud	Slight.....	Slight.....	.0006	.0064	.0700	.0000	1.4	22.7	18.1	—	Trace
289 and 326, Ohio river water.														

289 and 326. Ohio river water.

JEFFERSON COUNTY.

Kent.—No public supply. Three private supplies were examined. None of the three were suitable for drinking purposes.

Madison.—This city owns its own supply, which was built in 1871, and gets the supply from the Ohio river and five wells. The water is pumped to a reservoir and 1,100,000 gallons per day are used. Four private supplies have been examined and none of the four were fit for drinking purposes.

JENNINGS COUNTY.

Vernon.—Vernon owns its own supply, which was built in 1893, and which gets its water from the Muscatatuck Creek. The water is pumped to a standpipe. Twenty thousand gallons daily are used, but the drinking water is from private cisterns. Two private supplies were analyzed; one was found to be a good water, and the other of fair quality only.

North Vernon.—This town owns its supply, which was built in 1892, and gets its supply from the Muscatatuck Creek and from springs. This water is pumped to a standpipe, and 250,000 gallons per day are used.

JOHNSON COUNTY.

Edinburg.—In 1893 this town had built a dug well, from which the water is pumped to a standpipe having a capacity of 42,500 gallons. About 125 families use this supply. One private well examined was found to be a good supply.

Franklin.—The Franklin Water & Light Co. is owned by the city and was built in 1890. The supply is obtained from bored wells and pumped to a standpipe and reservoir. The average daily supply consumed is 275,000 gallons.

Greenwood.—The Citizens' Water & Light Co., a private company, installed about three years ago a drilled well, the water from which is pumped into the mains. About 50,000 gallons are used daily. One private well water analyzed was found to be badly polluted, and unfit for use.

Whiteland.—No public supply. One private supply was examined and found to be unfit for use.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF GREENWOOD PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
555	Sept. 8, 1906.....	None.....	0.0	None.....	None.....	.0000	.0060	.0200	.0003	5.0		56.2	29.0	29.6	0.0

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF VINCENNES PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
261	April 5, 1906.....	None.....	5—	V. s.....	V. s.....	.0064	.0128	.1000	.0003	1.0	18.8	16.0	5.0	.00

KNOX COUNTY.

Sanborn.—No public supply. Water from a private well was analyzed and found to be of good quality.

Vincennes.—The Vincennes Water Supply Co., a private corporation, built in 1886 a supply which gets the water from the Wabash river. The water is pumped to a standpipe after being filtered. About 800,000 gallons per day are used. One private supply was examined and found to be of fair quality.

KOSCIUSKO COUNTY.

Leesburg.—No public supply. Water from a private well examined was found to be of good quality.

Milford.—A system of wells built in 1902 furnishes the public supply. The water is pumped to a standpipe, and about 55 families use the supply.

Pierceton.—In 1897 this town had a tubular well built, the water from which is pumped into a supply tank. About 18,000 gallons per day are used.

Warsaw.—A private company, called the Warsaw Water Works Company, furnishes the supply for this town. Water is taken from a small lake and pumped to a standpipe. About 1,000,000 gallons per day are used. Two analyses of private supplies were made. One was badly polluted and one was of fair quality.

LAGRANGE COUNTY.

Lagrange.—The public water supply, built in 1893, is owned by the city. Six bored wells are used and the water is pumped direct into the mains.

Lima.—No public supply. Water from two private supplies examined proved to be, one of good quality, and one polluted.

LAKE COUNTY.

Crown Point.—A system of wells was built in 1895 and 1896 for this city. The water is pumped to a reservoir and then to a standpipe; 100,000 gallons per day are consumed.

Dyer.—No public supply. Three private supplies examined. Two were unfit for drinking purposes, and one was of fair quality.

East Chicago.—In 1894 this city built a system which gets its supply from Lake Michigan. The water is pumped to a standpipe. Three million gallons daily are consumed.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF WARSAW PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alb. minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
37	Oct. 3, 1905.	S. earthy	.20	Slight	Slight	.0010	.0110	.0000	.0001	.30				.0420

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF HOBART PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alb. minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
369	June 1, 1906.	S. oily.	5—	None	V. s., red.	.0120	.0112	.5000	.0180	3.6	37.2	27.5	8.4	.03
370	June 1, 1906.	Earthy	5—	S.	Ex. earthy.	.0018	.0154	.4500	.0003	2.7	33.9	25.0	8.7	.02
371	June 1, 1906.	Earthy	5—	V. s.	V. s.	.0054	.0128	.3000	.0040	2.4	32.9	25.3	8.6	.015
372	June 1, 1906.	S. earthy.	5—	None	Mch. red.	.0090	.0150	.5300	.0200	3.4	39.8	38.9	9.0	.015
373	June 1, 1906.	S. earthy	5—	S.	Ex. red.	.0020	.0190	.5000	.0002	3.4	39.1	27.0	9.0	.04
374	June 1, 1906.	Earthy	5—	Mkd.	Ex. earthy.	.0014	.0270	.5200	.0003	2.5	36.7	27.3	8.8	.05

Hammond.—This supply was built in 1892 and gets its water from Lake Michigan. The water is pumped direct from the lake into the mains. Six million gallons per day are consumed.

Hobart.—This public supply is from wells. The water is pumped to a standpipe.

Lowell.—In 1898 a deep bored well was built for this town. The water is pumped to a standpipe holding 80,000 gallons. About 250 families use this supply.

Merrillville.—No public supply. Water from a private well examined was found to be unfit for use.

Whiting.—The Standard Oil Company built, about 15 years ago, the public supply for Whiting, and they still own it. About 1,200 people use this supply.

LAPORTE COUNTY.

Laporte.—In 1870 this city built its water supply. The water is from Pine and Stone lakes, and is pumped into a reservoir. The reservoir is part of Lily Lake. One million gallons are used per day, but the water for drinking purposes is from private wells. One private supply examined was found to be of good quality.

Michgian City.—The city controls and owns most of the stock in the plant installed in 1888. The water is taken from Lake Michigan and is supplied by direct pressure. There are many private wells, also. Water from seven school-houses was analyzed; three were of good quality, three fair, and one was unfit for use. Four private supplies were also examined and three were found suitable for use, and one was unsatisfactory.

LAWRENCE COUNTY.

Bedford.—In 1892 this city built its water plant. The supply is taken from White River and is pumped to a standpipe. The water is not filtered and is not generally used for drinking purposes, water for drinking and domestic purposes being from private wells. Water from five private supplies was examined. One was of good quality, three were fair and one was not satisfactory.

Mitchell.—Bored and dug wells furnish this supply. Two samples analyzed were found to be of good quality.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MICHIGAN CITY PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
201	Feb. 5, 1906.....	None.....	0.0	Sl.....	None.....	.0090	.0050	.0050	.0003	.60	17.0	13.1	5.4	.00
897	Feb. 9, 1907....	None.....	0.0	None.....	None.....	.0014	.0010	.0100	.0003	.80	15.0	11.0	10.6	.00
921	Mar. 9, 1907.....	None.....	0.0	V. s.....	V. s.....	.0014	.0100	.0300	.0005	.50	16.2	12.4	12.2	Trace.
925	Mar. 9, 1907.....	None.....	0.0	V. s.....	V. s.....	.0010	.0050	.0200	.0006	.40	14.4	12.6	11.8	Trace.
926	Mar. 16, 1907....	None.....	0.0	None.....	V. s.....	.0010	.0024	.0000	.0000	.60	16.0	10.0	9.2	.00
940	Mar. 30, 1907....	V. sl.....	0.0	None.....	None.....	.0120	.0030	.0100	.0003	.40	23.2	17.0	12.2	.00

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MICHIGAN CITY SCHOOL WELLS.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
890	Feb. 9, 1907.....	None.....	0.0	None.....	None.....	.0010	.0004	.0100	.0003	.80	18.0	12.0	11.7	.08
891	Feb. 9, 1907.....	None.....	0.0	None.....	None.....	.0014	.0004	.1500	.0000	.60	16.0	11.2	10.5	.00
892	Feb. 9, 1907.....	None.....	5.—	Sl.....	None.....	.0124	.0044	.0100	.0000	2.3	32.4	20.0	15.4	.20
893	Feb. 9, 1907.....	None.....	0.0	V. s.....	None.....	.0154	.0030	.0200	.0003	.5	5.0	2.0	1.0	.01
894	Feb. 9, 1907.....	None.....	0.0	None.....	None.....	.0484	.0036	.0200	.0000	28.6	76.0	70.0	32.3	.02
895	Feb. 9, 1907.....	None.....	0.0	V. s.....	None.....	.0150	.0010	.0050	.0000	9.1	51.0	30.0	14.2	.12
896	Feb. 9, 1907.....	Sl. f.....	0.0	Mkd.....	None.....	.0660	.0220	.0300	.0000	1.2	45.0	36.0	29.6	.01

MADISON COUNTY.

Alexandria.—In 1894 this city had built a system of drilled wells. The water is pumped to a standpipe. About 800 families use this supply.

Anderson.—The city of Anderson owns its supply, which gets its water from White River. The water is supplied by direct pressure from clear well. About 2,000,000 gallons per day are used. The water is filtered.

Elwood.—A private company, built in 1891, furnishes Elwood with its supply. The system is of driven wells, pumped into a reservoir. About 100,000 gallons per day are used. Many private wells are also used.

Frankton.—Frankton's public system is owned by the city and was built in 1899. The water is from a dug well, and 50,000 gallons per day are used. Drinking water is from private wells. One private supply analyzed was a good water.

Pendleton.—No public supply. Two private supplies were examined, neither of which were suitable for drinking purposes.

Summitville.—The supply was built in 1902 and is owned by the city. A drilled well furnishes the supply.

MARION COUNTY.

Acton.—No public supply. Water from two private supplies were analyzed and both found to be bad.

Beech Grove.—No public supply. One private supply was analyzed and found to be polluted.

Ben Davis.—No public supply. Three private supplies were examined. Two were of good quality and one was polluted.

Bridgeport.—No public supply. One private supply was analyzed and found to be good.

Broad Ripple.—No public supply. Five samples from private wells were analyzed and all found to be of doubtful quality.

Clermont.—No public supply. Four private supplies were analyzed. Two were good and two were polluted.

Cumberland Station.—No public supply. One private well water was analyzed and found to be of good quality.

Ft. Benj. Harrison.—No public supply. One well water analyzed was found to be bad.

Haughville.—No public supply. One private supply was examined and found to be of good quality.

Indianapolis.—The Indianapolis Water Company, a private com-

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELLS AT BEDFORD.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.			Nitrogen as			Solids.		Hardness.	Iron.
						Free.	Albu- minoid.		Nitrates.	Nitrites.	Chlorine.	Total.	Fixed.		
646	Oct. 12, 1906	None	0.0	V. s.	V. s.	.0010	.0020		.1200	.0020	15.20	84.0	60.7	28.0	.05
647	Oct. 12, 1906	None	— .5	V. s.	S. reddish.	.0000	.0024		.0000	.0003	4.40	56.2	44.0	30.6	.04
658	Oct. 16, 1906	None	0.0	Slight.	Mch. reddish.	.0010	.0024		.0400	.0010	11.2	80.0	59.0	34.6	.12
659	Oct. 16, 1906	None	0.0	Much.	Mkd. reddish.	.0060	.0034		.6000	.0020	16.9	92.7	64.2	28.0	.40
1047	July 1, 1907	None	3.0	Much.	V. m. white.	.0024	.0168		.0300	.0001	.1	37.0	32.6	19.9	Trace.

646. North side square. 647. Sixteenth street. 658. West side square. 659. East side square.

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELLS AT MITCHELL.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.			Nitrogen as			Solids.		Hardness.	Iron.
						Free.	Albu- minoid.		Nitrates.	Nitrites.	Chlorine.	Total.	Fixed.		
566	Sept. 12, 1906	None	0.0	None	V. s.	.0014	.0024		1.000	.0003	6.80	64.5	42.8	21.8	0.0
567	Sept. 12, 1906	None	0.0	V. s.	S. earthy.	.0030	.0060		.8000	.0025	8.20	61.4	41.4	21.2	0.0
603	Sept. 20, 1906	None	0.0	None	V. s.	.0010	.0060		.1200	.0020	25.10	97.6	75.8	21.6	0.0

566. "Bigg's" public well. 567. Corner Sixth and Main. 603. Location unknown.

pany, built in 1870 a system which obtains the supply from deep wells and a canal from White River. The capacity of the filtration system is 24,000,000 gallons per every 24 hours. It is estimated that 100,000 use the supply. Sixty-three samples from private supplies have been analyzed in the city. Thirty-eight were found to be of good quality; 15 were badly polluted, and 10 were doubtful.

Oaklandon.—No public supply. Water from one private supply was found to be of good quality.

Southport.—No public supply. Six private supplies examined. Two were of good quality, and four were doubtful.

Valley Mills.—No public supply. Two well waters analyzed. One good and one polluted.

West Newton.—No public supply. One private supply analyzed. was of doubtful character.

MARSHALL COUNTY.

Argos.—In 1897 this town built a public supply, which consists of a driven well. The water is pumped to a cistern with a capacity of 800 barrels. About 30,000 gallons per day are used.

Bourbon.—A private company furnishes this public supply, built in 1899. The water is obtained from bored wells and is pumped to a standpipe. An average of 30,000 gallons a day is used. A reservoir from which the water is forced is used for fire purposes. Water from one private supply was analyzed and found to be of good quality.

Bremen.—A system of bored wells from which the water is pumped to a standpipe holding 2,700 barrels is used. Two hundred thousand gallons daily are used. There are many private wells.

Culver.—No public supply. One private supply analyzed was found to be of fair quality.

Plymouth.—This town owns a system of flowing wells. The water is supplied by direct pressure. One hundred and fifty thousand gallons daily are used. Water from three private supplies were examined and all were found to be good.

MARTIN COUNTY.

Loogootee.—No public supply. Thirteen private supplies were examined. Twelve of this number were unfit for use and one was a good supply.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF INDIANAPOLIS PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
378	May 29, 1906	Sl. earthy	None	None	None	.0018	.0072	.0300	.0000	10.2	58.5	43.4	23.3	0.0
824	Dec. 15, 1906	None	None	None	None	.0030	.0020	.1200	.0003	5.2	42.8	29.8	21.5	Trace.
837	Jan. 1, 1907	None	0.0	V. sl.	None	.0004	.0004	.4000	.0003	2.4	37.0	27.2	25.4	0.0
993	May 11, 1907	None	0.0	None	None	.0010	.0020	.0050	.0000	7.8	45.4	35.0	24.0	.01
996	May 18, 1907	None	0.0	None	None	.0000	.0020	.0500	.0003	4.8	43.0	35.0	23.9	.02
1015	June 8, 1907	None	0.0	None	None	.0022	.0084	.2500	.0005	2.2	36.0	21.0	20.3	.014
1298	Aug. 31, 1907	Sl.	0.0	None	Consid.	.0050	.0028	.0200	.0004	3.4	58.8	39.8	25.4	.100
1348	Oct. 18, 1907	None	23.0	Sl.	None	.0040	.0060	.0000	.0001	4.8	49.6	39.2	25.6	.080
1349	Oct. 18, 1907	None	9.0	Much.	Sl. gran.	.0040	.0050	.0000	.0000	4.8	52.6	42.4	26.6	.100
1352	Oct. 24, 1907	None	9.0	V. sl.	None	.0014	.0024	.0100	.0000	4.40	45.4	35.6	27.0	.024
1357	Oct. 26, 1907	None	33.0	V. sl.	Sl.	.0008	.0074	.0000	.0001	5.80	44.4	37.0	26.8	.080
1361	Oct. 30, 1907	None	9.0	None	V. sl.	.0054	.0060	.0000	.0000	5.80	50.4	37.6	25.4	.080
1364	Oct. 31, 1907	None	9.0	Sl.	V. sl.	.0016	.0030	.0000	.0000	5.70	48.8	37.6	25.2	.080
1367	Nov. 11, 1907	None	9.0	Sl.	None	.0032	.0040	.0000	.0000	5.20	48.4	36.8	23.8	.080

MIAMI COUNTY.

Bunker Hill.—No public supply. Five samples from private wells were analyzed. Of this number four were suitable for drinking purposes and one was of doubtful quality.

Peru.—A system of drilled wells was built in 1878 for this city. This water is pumped to a reservoir. About 1,500,000 gallons daily are used. Ten samples from private wells have been analyzed, and five were found to be potable; the other five were not suitable for drinking purposes.

Converse.—This town built a system of drilled wells in 1892. The water is pumped to a tank with a capacity of 30,000 gallons. About 135,000 gallons per day are used.

MONROE COUNTY.

Bloomington.—In 1893 this town had built a supply which takes the water from a large pond. The water is pumped to a reservoir and from there into the mains. It is filtered through sand and gravel. Seven hundred families use the supply.

MONTGOMERY COUNTY.

Crawfordsville.—The Crawfordsville Water and Light Company, a private company, built in 1885, a system which gets its supply from springs and wells. The water is pumped to a standpipe from a reservoir. About 1,000,000 gallons per day are used. There are also many private wells. Thirteen private supplies have been examined. Five of these were of good quality, three were fair and five were not suitable for drinking purposes.

Darlington.—A private company operates a supply for this town. The water is taken from a spring. Many private wells are also used.

Ladoga.—No public supply. One private supply examined was found to be badly polluted.

Newmarket.—No public supply. Ten private supplies examined. Eight were polluted and unfit for drinking purposes, and two were of satisfactory quality.

New Ross.—No public supply. One private well water analyzed was badly polluted.

Shannondale.—No public supply. One shallow well water analyzed was found to be badly polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF PERU PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
883	Jan. 16, 1907	S. fl.	0.0	Much	V. m. earthy.	.0040	.0010	.0000	.0000	18.2	77.2	58.0	21.4	.01
888	Jan. 26, 1907	None.	0.0	None.	V. s.	.0040	.0000	.1000	.0008	15.6	70.0	53.0	27.1	.01
1088	July 16, 1907	None.	0.0	None.	Con.	.0390	.0204	.1500	.0010	8.40	57.0	40.0	24.5	Trace.
1140	Aug. 2, 1907	None.	0.0	V. s.	Sl. floe.	.0024	.0120	.1500	.0010	9.8	65.6	49.0	38.0	.00
1141	Aug. 2, 1907	None.	0.0	V. s.	V. s. floe.	.0070	.0030	.2000	.0000	5.4	52.8	40.0	31.0	.08

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF CRAWFORDSVILLE PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
390	July 18, 1906	None.	0.0	Sl.	M. reddish.	.0010	.0016	.0200	.0006	1.10	55.5	42.1	17.8	.10
415	July 18, 1906	S. earthy	0.0	Sl.	M. reddish.	.0040	.0048	.0100	.0005	1.20	60.0	43.1	18.5	.08
579	Sept. 15, 1906	None.	0.0	Sl.	M. reddish.	.0160	.0140	.0000	.0002	.90	53.8	41.5	31.0	.04
941	Mar. 30, 1907	None.	0.0	V. s.	Sl. reddish.	.0050	.0010	.0300	.0003	1.0	60.0	41.4	36.7	.04
1061	July 8, 1907	Sl. earthy.	0.0	Sl.	M. reddish.	.0000	.0010	.0000	.0000	.2	47.0	38.6	29.1	.024
1062	July 8, 1907	Sl. veg.	0.0	Sl.	M. reddish.	.0020	.0020	.0000	.0001	.9	59.0	46.0	35.1	.036

MORGAN COUNTY.

Martinsville.—A dug well built in 1893 supplies this town, the water from which is pumped direct into the mains. Six hundred thousand gallons per day are used. Two private supplies examined were found to be—one of good quality and the other unsatisfactory for drinking purposes.

Mooreville.—A private company furnishes this town with its supply, which consists of two drilled wells. About 15,000 gallons per day are used. One private supply analyzed was found to be of fair quality.

Morgantown.—No public supply. One private supply examined was found to be badly polluted.

NEWTON COUNTY.

Goodland.—Private and bored wells supply this town.

Kentland.—A well bored in 1895 for gas furnishes the water for this town. The water is pumped to a reservoir.

NOBLE COUNTY.

Albion.—This town owns a system of driven wells built in 1895. The water is pumped by direct pressure. Two hundred and fifty families use an average of 50,000 gallons per day.

Avilla.—This supply consists of a drilled well owned by the town, the water from which is pumped to a reservoir. An average of 500 gallons per day is used. There are many private bored wells. One private supply examined was found to be unfit for use.

Ligonier.—Sixteen years ago this town built a water supply, and in 1905 a new plant was installed, consisting of driven wells. The water is pumped to a tank holding 100,000 gallons. An average of 200,000 gallons per day is used. Four analyses were made of a private supply, and each time the water was found to be of unsatisfactory quality.

Kendallville.—Driven wells were installed in this town in 1887, the water being supplied by direct pressure. About 450 families use the supply.

OHIO COUNTY.

No public supply.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MARTINSVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
59	Oct. 11, 1905.	None.	0.0	None.	None.	.0000	.0010	.4000	.0001	1.50	37.9	27.5		.026
1184	Aug. 16, 1906.	None.	0.0	None.	Sl. floe.	.0010	.0014	.1500	.0010	1.00	39.8	33.4	25.2	.08

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MOORESVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
124	Nov. 22, 1905.	None.	0.0	V. pro.	Con. earthy.	Trace.	.0014	.6000	.0001	9.4	108.4	68.5	20.3	.120

ORANGE COUNTY.

French Lick.—This town has its public supply, which gets the water from a stream. There are many mineral springs there. The water from French Lick Creek is filtered by private filters.

Paoli.—A private company built the public supply for this town in 1895. The source of the supply is Lick Creek. This water is pumped to a reservoir and about 40 per cent. of the population use the supply. Four private supplies were analyzed. Four were potable and two were bad.

West Baden.—The West Baden Springs Company owns the supply of this town, which was built about 14 years ago. The supply is taken from Lost River and is pumped to a reservoir holding 1,000,000 gallons. About fifty families use the supply.

OWEN COUNTY.

Spencer.—No public supply. Four private supplies examined were all found to be of fair quality.

Quincy.—No public supply. One private supply examined was found to be of good quality.

PARKE COUNTY.

Bloomington.—No public supply. One private well water was analyzed and found to be of doubtful quality.

Bellmore.—No public supply. One water examined was found to be badly polluted.

Judson.—No public supply. Water from a shallow well examined was badly polluted.

Marshall.—No public supply. One private sample was found to be good.

Montezuma.—No public supply. A private supply was examined and found to be of doubtful character.

Nyesville.—No public supply. One well water was analyzed and was satisfactory.

Rockville.—In 1903 Rockville established a public supply for the business portion of the town, consisting of driven wells. The water is pumped to a tank. The residence part of the town is supplied with wells. Three of these wells were examined and one was of fair quality, one was badly polluted and the other a good water.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LIGONIER PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
720	Oct. 27, 1906.	None.	0.0	None.	V. s. reddish.	.0104	.0014	.0000	.0005	.4	32.0	26.8	28.5	.05
85	Oct. 23, 1905.	None.	0.4	Marked.	Cons. lime.	.0024	.0034	.0000	.0000	.2	35.8	32.7	.....	.06

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT CHESTERTON

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
303	April 30, 1906.	None.	0.0	None.	None.	.0014	.0024	.3000	.0003	3.00	46.7	38.5	11.8	S. tr.

PERRY COUNTY.

Cannelton.—The Cannelton Water Works, a private company built about 14 years ago, supplies this town with water from the Ohio River. This water is pumped to a reservoir. Two hundred families use about 25,000 gallons per day.

Tell City.—This city owns a plant which was installed in 1902. The supply is from wells which are on the banks of the Ohio River. This is pumped to a standpipe. About 50 per cent. of the inhabitants use the supply.

PIKE COUNTY.

Petersburg.—In 1901 this town's supply was built. The water is taken from White River and is pumped to a standpipe holding 120,000 gallons. About 50,000 gallons per day are used.

Winslow.—No public supply. Water from a driven well was examined and found to be unfit for use.

PORTER COUNTY.

Chesterton.—No public supply. Three private supplies examined were found to be good waters.

Valparaiso.—The Valparaiso Home Water Company furnishes the supply for this city. The plant was built in 1886 and the supply is taken from a lake and pumped by direct pressure. About 950,000 gallons daily are used. One analysis made of this supply showed the water to be in good condition. One analysis made of a private supply showed the same to be a good water.

POSEY COUNTY.

Cynthiana.—This town has three public wells.

Mt. Vernon.—The Mt. Vernon Water Works Co., built in 1866, with a filter plant added in 1903, furnishes the supply for this town. The water is taken from the Ohio and pumped into a standpipe; 750,000 gallons per day are used. Three private supplies examined showed all to be good.

New Harmony.—This town is supplied from two private tanks. The supply for these tanks is taken from driven wells. About 1,000 barrels daily are used. Water from a private driven well was examined and found to be of a satisfactory quality.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF VALPARAISO PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
510	Aug. 25, 1906.	None.	5.0	None.	Much fine.	.0160	.0570	.0000	.0000	2.00	8.2	2.9	3.8	.0000
511	Aug. 25, 1906.	Dec. veg.	7.0	None.	Con. floe.	.0112	.0288	.0200	.0003	.40	9.3	4.5	4.9	.01

CHEMICAL ANALYSIS OF WATER FROM GREENCASTLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
266	April 5, 1906.	None.	5—	V. s.	S.	.0014	.0164	.1000	.0000	.40	28.9	25.0	11.4	.00
293	April 21, 1906.	None.	0.0	None.	V. s.	.0010	.0058	.1000	.0000	1.40	31.1	27.0	12.0	.00
298	April 21, 1906.	None.	0.0	None.	None.	.0010	.0034	.1200	.0000	.25	31.5	28.0	11.6	.015
729	Oct. 30, 1906.	None.	0.0	V. s.	S. earthy.	.0024	.0114	.0100	.0004	.50	29.0	22.9	22.6	.020
746	Nov. 10, 1906.	Sl.	0.0	Sl.	Con. earthy.	.0010	.0080	.0200	.0000	.40	31.2	24.4	23.8	Trace.
1227	Aug. 31, 1907.	Sl.		None.	None.	.0004	.0062	.0150	.0004	.30	30.0	23.0	21.2	.00
1244	Sept. 6, 1907.	None.	4.	None.	None.	.0014	.0124	.0000	.0001	.10	31.6	28.4	23.2	.00

PULASKI COUNTY.

No public supplies.

PUTNAM COUNTY.

Greencastle.—A private company, the Greencastle Water Works Company, built a supply in 1887, taking the water from the Big Walnut stream. The water is pumped to a standpipe. About 75,000 gallons per day are used. Two private supplies examined. One was found to be a good water and the other supply was unfit for drinking purposes.

RANDOLPH COUNTY.

Farmland.—No public supply. One private supply was analyzed and found to be badly polluted.

Modoc.—No public supply. Three private supplies were examined. Two were unfit for drinking purposes, and one was a good water.

Parker.—No public supply. Water from a private well was analyzed and found to be badly polluted.

Union City.—In 1873 this city built a system of wells. The water is pumped into the mains. Wells furnishing 500,000 gallons per minute are used only in case of fire. The average daily consumption is 306,000 gallons.

Winchester.—The Citizen's Water and Light Company a private concern, built a system of drilled wells in 1900. A brick reservoir is used and the water is pumped through the mains by direct pressure. About 275 families use this supply. Water from two private supplies were analyzed. One was of doubtful quality and the other was a good water.

RIPLEY COUNTY.

Batesville.—The Batesville Water Works Company, built in 1902 and owned by a private concern, supplies this town with water from a spring and ponds. The water is pumped to a tank holding 50,000 gallons. About 80 families use this supply.

Napoleon.—No public supply. One private supply examined was found to be badly polluted.

Osgood.—No public supply. One cistern water examined was found to be of good quality.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF WINCHESTER PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hard-ness.	Iron.
						Free.	Albu-minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
648	Oct. 12, 1906.....	None.....	0.0	None.....	None.....	.1100	.0070	.0000	.0002	.8		39.4	30.2	33.1	Trace.
1383	Nov. 8, 1907.....	None.....	9.	None.....	None.....	.0550	.0030	.0100	.0080	1.00		41.0	32.0	31.2	.04

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF SOUTH BEND PUBLIC SUPPLY.

Parts in 100,000

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu-minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
179	Jan. 15, 1906.....	None.....	0.0	None.....	V. s. earthy.....	.0004	.0014	.0600	.0007	1.0	35.7	29.5	21.2	.00
1285	Sept. 14, 1907.....	None.....	2.0	None.....	Sl. granular.....	.0000	.0004	.0050	.0001	1.70	39.0	29.2	23.5	.00
1286	Sept. 14, 1907.....	None.....	2.0	None.....	Sl. granular.....	.0000	.0004	.0050	.0001	1.8	39.8	28.8	23.1	.00

RUSH COUNTY.

Carthage.—No public supply. Water from a dug well was analyzed and found to be badly polluted.

New Salem.—No public supply. Water from a school-house was analyzed and found to be unsatisfactory for drinking purposes.

Rushville.—In 1896 this city had built a supply of tubular wells. The water from these is pumped to a reservoir holding 400,000 gallons. About 50 per cent. of the inhabitants use this supply. Four private supplies were analyzed, none of which were very satisfactory for drinking.

SCOTT COUNTY.

Scottsburg.—No public supply. One private supply was examined and found to be of good quality.

SHELBY COUNTY.

Shelbyville.—A private company, the Citizens Water and Light Company, built a system of driven wells for this town twenty-one years ago. The supply is pumped direct to mains. About 300 families use the supply. One analysis of this supply has been made and at that time, December 11, 1906, the water was satisfactory. One analysis has been made of a private supply and this was found to be of good quality.

SPENCER COUNTY.

Rockport.—A private company called the Rockport Water Works Company, built a number of deep wells for this city in 1877. This water is pumped to a standpipe holding 60,000 gallons. Nearly all the population use this supply. One private supply was examined and found to be a good water.

St. Meinard.—In 1874 this town built a supply consisting of a well and spring, the spring being piped into the well.

ST. JOSEPH COUNTY.

New Carlisle.—A system of driven wells was built for this town twenty-six years ago. The water is pumped from these wells to a reservoir holding 33,000 gallons. One hundred families use this supply. Water from a private driven well was analyzed and found to be unfit for use.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF "ANGOLA" PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
81	Oct. 23, 1905.....	None.....	0.6	Marked.....	Much red.....	.0074	.0034	.0000	.0000	1.6	47.3	38.2	.....	.08
79	Oct. 23, 1905.....	None.....	0.6	Marked.....	Much red.....	.0092	.0034	.0100	.0000	1.6	47.5	40.2	.....	.08

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LIBERTY PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
65	Oct. 11, 1905.....	Decided earthy....	0.0	None.....	None.....	.0022	.0164	.3000	.00032	1.30	.....	.....	.....	.00
77	Oct. 23, 1905.....	Decided musty....	.3	Slight.....	Slight.....	.0038	.0144	.2000	.0010	1.00	36.0	21.5	.....	Trace.
334	May 12, 1906.....	S. earthy.....	.5	V. s.....	S. earthy.....	.0000	.3200	.2300	.0008	19.60	159.8	93.7	14.	Trace.
1185	Aug. 16, 1907.....	V. strong musty....	.4	None.....	None.....	.0124	.0284	.0400	.0010	.90	31.8	23.2	22.3	.02

Mishawaka.—This town owns its supply, which takes the water from the St. Joseph River. The water is forced into the mains. This is not used for drinking purposes. Four private supplies have been examined and all were of good quality.

South Bend.—In 1873 this city had a system of artesian wells built. A standpipe is used and 4,064,529 gallons daily are used. Six thousand families use the supply. Water from six private wells has been examined. Four of these were good supplies, one was of fair quality and one was not suitable for use.

Walkerton.—In 1897 this town had three driven wells built. This water is pumped to a standpipe. About 50 per cent. of the people use this supply.

STARKE COUNTY.

Hamlet.—No public supply. One private supply examined showed the water to be unfit for use.

Knox.—No public supply. Water from a driven well examined was satisfactory.

STEUBEN COUNTY.

Angola.—A private company, the Angola Electric Light, Power and Water Company, built a system of bored wells in 1893. Four hundred and fifty families use an average of 300,000 gallons daily. If the mains are not flushed often this water is not of good quality. Two private supplies were examined and found to be of satisfactory quality.

SULLIVAN COUNTY.

Fairbanks.—No public supply. Three private supplies have been analyzed. Two of these were badly polluted and one was of fair quality.

Farmersburg.—No public supply. Seven private well waters were examined. Six of these supplies were heavily polluted and one was of fair quality only.

Sullivan.—This town owns a public system which takes its supply from a small creek. This was built about ten years ago. A standpipe is used. About 450,000 gallons per day are used, but not for drinking and domestic purposes, as private wells are used for that. One private supply was analyzed and found to be badly polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF EVANSVILLE PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
262	Mar. 30, 1906	Earthy	0.0	V. marked	V. marked	.0064	.0250	.1000	.0010	.3	28.5	25.0	3.00	Trace.
263*	Mar. 30, 1906	None	5.	Slight	Much reddish	.0014	.0020	.0014	.0020	2.8	59.2	50.0	15.4	.06
927	Mar. 11, 1907	V. slt. earthy	0.0	V. marked	1.16 in. mud	.0016	.0036	.0400	.0003	.6	52.4	46.0	6.0	0.0
951	April 3, 1907	None	0.0	Marked	Ex. muddy	.0014	.0060	.0700	.0000	.80	60.0	52.0	8.0	0.0
957	April 4, 1907	None	0.0	V. marked	Marked muddy	.0000	.0014	.0700	.0000	.80	20.2	11.4	6.4	.04
964	April 10, 1907	V. slt.	0.0	Marked	Marked muddy	.0000	.0010	.0100	.0000	.80	20.0	14.0	6.8	0.0
974	April 21, 1907	V. sl. earthy	0.0	Much	Mkd. earthy	.0010	.0010	.0300	.0003	.90	18.0	13.0	6.0	0.0
975	April 21, 1907	V. slt.	0.0	Marked	V. marked	.0010	.0020	.0300	.0006	.90	21.4	16.0	8.8	Trace.
1007	May 26, 1907			Marked	V. marked	.0050	.0300	.0500	.0003	.80	34.6	25.4	6.1	0.0

*Water from public well.

SWITZERLAND COUNTY.

Vevay.—This town owns a water supply which was built in 1895, and which gets its water from the Ohio River. This is pumped to a reservoir holding 1,500,000 gallons. This water is not used for drinking purposes, private wells being used for that.

TIPPECANOE COUNTY.

Lafayette.—In 1875-76 this city built a public supply consisting of driven wells. This supply is pumped to a reservoir that has a capacity of 4,200,000 gallons. About 5,000 families use the water, and an average of 2,500,000 gallons per day is used.

West Lafayette.—A private company built a supply of driven wells here in 1893.

TIPTON COUNTY.

Tipton.—This city built a system of driven wells in 1892. This water is pumped into two barrel cisterns holding 20,000. About 700 families use this water. One private supply examined was found to be badly polluted.

Sharpsville.—No public supply. One well water was analyzed and found to be potable.

UNION COUNTY.

Liberty.—In 1894 this town built a supply, the source being five springs. These springs are walled and piped into a reservoir. About 250 families use the supply. Four private supplies have been examined. Three were of good quality and one was doubtful.

VANDERBURGH COUNTY.

Evansville.—In 1900 Evansville completed new water works. The supply is taken from the Ohio River and is pumped direct into the mains. Four thousand families use the supply, 9,000,000 gallons daily being used. Twenty private supplies have been analyzed. Of this number ten were potable, seven were polluted and three were of doubtful character.

CHEMICAL ANALYSIS OF WATER FROM EVANSVILLE SCHOOLS.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
532	Aug. 29, 1906	Limy	0.0	None	V. sl. blk.	.0000	.0060	.0400	.0002	.8	13.0	9.5	7.1	.01
533	Aug. 29, 1906	V. sl.	0.0	None	V. sl.	.0000	.0036	.0450	.0000	.8	3.8	1.8	7.3	Trace.
559	Sept. 6, 1906	None	5.	V. sl.	V. sl.	.0014	.0074	.0500	.0000	.9	14.2	9.6	6.6	0.0
560	Sept. 6, 1906	V. sl. limy	0.0	None	V. sl.	.0000	.0074	.0400	.0000	.3	5.6	3.7	2.8	.01
575	Sept. 14, 1906	None	0.0	Slt.	Sl. whitened	.0000	.0048	.0700	.0000	2.0	20.0	13.8	9.2	0.0
854	Jan. 16, 1907	V. sl.	0.0	Much.	Sl.	.0010	.0010	.0300	.0000	.8	11.4	9.2	4.4	Trace.
855	Jan. 16, 1907	None	0.0	Much.	Sl.	.0020	.0014	.0300	.0000	1.0	11.0	7.4	4.0	Trace.

VERMILLION COUNTY.

Cayuga.—No public supply. One private supply examined and found to be good.

Clinton.—Public supply of driven wells. The water is not a normal supply, as bacteria of the colon type are present.

Dana.—No public supply. One private supply was examined and found to be suitable for use.

VIGO COUNTY.

Terre Haute.—A private company called the Terre Haute Water Works Company, owns the supply of this city. The water is pumped from the Wabash River into a settling basin, after which it is passed through mechanical filters and then distributed under direct pressure. Probably 40 per cent. of the population use this supply, the other 60 per cent. being supplied by private wells. Ten supplies other than the city water have been analyzed. Seven were good waters, two were fair and one was badly polluted.

WABASH COUNTY.

North Manchester.—A system of flowing wells established in 1894 is owned by this town. The water is pumped to a standpipe and 70,000 gallons per day is used.

Wabash.—A private company, the Wabash Water Company, built in 1886, gets its supply from bored wells and pumps the water to a standpipe. Seventy-five per cent. of the families use this supply. Three private supplies were analyzed; one was of good quality and the other two were not satisfactory.

WARREN COUNTY.

No public supplies.

WARRICK COUNTY.

Booneville.—This city owns an artificial lake which was built in 1896. A standpipe is used. Three hundred and fifty families use this supply. Seven private supplies have been analyzed. Four of these were of good quality, one was badly polluted and two were of doubtful quality.

CHEMICAL ANALYSIS OF WATER FROM TERRE HAUTE PUBLIC SUPPLY

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
756	Nov. 16, 1906	None	0.0	None	V. s.	.0030	.0100	.0000	.0002	12.0	58.8	44.1	24.0	0.0
759	Nov. 16, 1906	None	0.0	None	None	.0000	.0070	.0000	.0000	12.2	60.5	46.7	21.4	0.0
763	Nov. 16, 1906	None	0.0	None	None	.0000	.0040	.0500	.0000	12.2	60.0	45.2	22.3	0.0
768*	Nov. 16, 1906	V. foul	0.0	Marked	Mkd. earthy	.0960	.0680	.0700	.0040	8.4	53.6	40.0	21.7	Trace.
770	Nov. 21, 1906	None	0.0	None	V. s.	.0020	.0048	.0300	.0000	12.2	54.6	41.4	21.9	0.0
778	Nov. 21, 1906	None	0.0	None	None	.0052	.0060	.0500	.0000	11.6	53.5	43.0	20.2	0.0
779	Nov. 21, 1906	None	0.0	None	None			.0400	.0000	5.6	41.1	30.6	18.2	0.0
1111	July 27, 1907	None	Sl. green	None	None	.0044	.0090	.2000	.0000	2.6	33.0	23.0	17.2	0.0
1219*	Aug. 27, 1907	None	6.3	Marked	V. m. mud	.0060	.0090	.0700	.0004	2.1	66.0	50.6	19.1	0.0
1220	Aug. 27, 1907	None	2.1	None	None	.0004	.0110	.0200	.0000	2.0	35.8	25.0	18.9	0.0
1320	Sept. 26, 1907	None	9.0	None	Sl. gran.	.0020	.0050	.0150	.0000	4.50	42.4	29.6	18.6	0.0
1321*	Sept. 26, 1907	Sl. earthy	12.0	Much	V. m. gran.	.0032	.0124	.0100	.0050	4.50	49.6	33.4	20.6	0.0
1354*	Oct. 26, 1907	None	6.0	None	Floc.	.0072	.0170	.0150	.0020	6.40	45.6	32.8	24.4	0.0
1355	Oct. 26, 1907	None		None	V. s.	.0020	.0090	.0050	.0000	6.20	43.8	35.0	24.0	0.0

*Unfiltered water taken from Wabash River.

WASHINGTON COUNTY.

Martinsburg.—No public supply. One supply analyzed was of doubtful quality.

Salem.—A system of springs built in 1884 furnishes the public supply of this town. A reservoir is used. About 80,000 gallons daily are used. Two private supplies examined were polluted.

WAYNE COUNTY.

Cambridge City.—The only supply this city has is for sprinkling and fire protection. Five private supplies have been analyzed. Four of these were of good quality, and one was a fair water.

Economy.—No public supply. One supply examined was of fair quality.

Fountain City.—No public supply. One private supply was examined and found to be of satisfactory quality.

Hagerstown.—No public supply. Five private supplies were examined. Three were of good quality, and two were polluted.

Milton.—No public supply. One well water analyzed was of good quality.

Richmond.—The Richmond Water Works Company, a private concern, built a well in 1884 and a system of gallery wells. A reservoir is used, holding 8,000,000 gallons. Two million gallons per day are used. One private supply was analyzed and found to be polluted by seepage.

WELLS COUNTY.

Bluffton.—In 1884 this town built a system of driven wells. The water is pumped by compressed air into a well. Three hundred and fifty thousand gallons per day are used. One private supply examined was a good water.

WHITE COUNTY.

Buffalo.—No public supply. One private supply was examined and found to be a good water.

Burnettsville.—No public supply. Two well waters were analyzed. One was good and the other unsuitable for drinking.

Monticello.—A dug well installed in 1895 is owned by this town. A standpipe is used. Two hundred thousand gallons per day are used. One spring water was analyzed and found to be of good quality.

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT CAMBRIDGE CITY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
130	Nov. 22, 1905.	None.....	0.0	None.....	None.....	Trace.	Trace.	.2000	.0003	1.2	38.7	30.4	14.0	0.00

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT HAGERSTOWN.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
245	Mar. 30, 1906	None.....	0.0	None.....	None.....	.0010	.0060	.2000	.0002	59.4	182.5	163.0	22.5	.00

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF RICHMOND PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
438	Aug. 8, 1906	None	0.0	None	V. slight.	.0010	.0098	.3500	.0003	.40	38.7	28.4	25.4	.0000
446	Aug. 8, 1906	Sl. foul	0.0	None	V. sl. earthy	.0000	.0026	.2000	.0003	.40	40.0	32.5	25.0	.0500
449	Aug. 11, 1906	Sl. earthy	0.0	None	V. slight	.0060	.0078	.1200	.0050	.20	32.1	23.5	19.7	.0000
488	Aug. 16, 1906	None	0.0	None	V. slight	.0010	.0046	.1500	.0001	.80	37.2	29.1	30.2	Trace.
490	Aug. 16, 1906	None	2.0	None	Sl. veg.	.0000	.0048	.1500	.0000	.50	39.1	29.4	25.7	Trace.
497	Aug. 22, 1906	Dec. musty	0.0	None	None	.0020	.0158	.1200	.0016	.20	38.5	25.0	20.2	Trace.
498	Aug. 22, 1906	None	0.0	None	None	.0000	.0026	.1000	.0000	.50	47.1	32.8	30.7	Trace.
499	Aug. 22, 1906	Dec. musty	0.0	Slight	V. slight	.0014	.0076	.1000	.0015	.25	37.2	25.0	20.1	.0100
536	Aug. 28, 1906	None	0.0	None	None	.0054	.0040	.0050	.0000	.25	42.6	34.6	26.6	.0200
537	Aug. 28, 1906	None	0.0	None	None	.0036	.0142	.0500	.0015	.275	34.3	26.2	22.5	Trace.
538	Aug. 28, 1906	None	0.0	None	None	.0014	.0046	.1500	.0000	.25	37.3	26.6	24.2	Trace.
539	Aug. 28, 1906	None	0.0	None	None	.0048	.0132	.0700	.0015	.25	30.4	22.8	18.1	.0000
540	Aug. 28, 1906	None	0.0	None	None	.0014	.0040	.1000	.0000	.30	35.6	27.2	24.1	.0050
541	Aug. 28, 1906	None	0.0	None	None	.0010	.0074	.0700	.0003	.275	32.7	25.0	22.5	.0000
613	Sept. 27, 1906	None	0.0	None	None	.0000	.0050	.1000	.0003	.20	35.0	27.3	23.3	.0200
614	Sept. 27, 1906	None	0.0	None	V. slight	.0000	.0044	.1000	.0003	.25	35.0	27.0	23.0	.0150

WHITLEY COUNTY.

Churubusco.—In 1898 this town had a bored well put in to be used as the public supply. The water is pumped to a standpipe holding 2,000 barrels. Two hundred families use this supply and an average of 30,000 gallons per day are used.

Columbia City.—This city built a system of drilled wells in 1894. The water is pumped to a standpipe by direct pressure. Seventy-five per cent. of the inhabitants use this water.

South Whitley.—Four bored wells built in 1896 supply this town. The water is pumped by direct pressure. About forty families use this supply.

CHEMICAL ANALYSIS OF WATER FROM MONTICELLO PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard- ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
102	Nov. 3, 1905.	None.	20.	Marked.	Consid. floe.			.0100	.0003	.30	34.5	29.2		
123	Nov. 22, 1905.	None.	10—	Marked.	V. s.	.0230	.0050	.0000	.0005	.40	33.5	28.0	16.2	.03
509	Aug. 25, 1906.	None.	5.0	Marked.	Consid.	.0250	.0042	.0000	.0220	1.00	37.5	29.2	29.9	.35

CHEMICAL ANALYSIS OF WATER FROM PUBLIC SUPPLY OF COLUMBIA CITY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard- ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
518	Aug. 25, 1906.	None.	0.0	Slight.	V. s.	.0214	.0034	.0000	.0000	1.00	40.5	32.3	29.9	.15

REPORT

OF

Bacteriological Department

LABORATORY OF HYGIENE

Year Ending October 31, 1907.

DR. HELENE KNABE, Acting Superintendent.

DR. ADA E. SCHWEITZER, Assistant Bacteriologist.

DR. ROSS S. RISSLER, Assistant Pathologist.

REPORT FROM THE

Division of Bacteriology and Pathology

OF THE

INDIANA STATE LABORATORY OF HYGIENE.

The work done in this Laboratory consists principally of such examinations and investigations as will result in the prevention or at least early recognition of infectious diseases. Especially in tuberculosis, typhoid fever and diphtheria, microscopical examination is of value, because:

1. The presence of these diseases can even by the most precise methods not always be determined with certainty.

2. When a case is sufficiently developed to be recognized clinically, it is often too late to save the patient. In the meantime, the disease has usually been communicated to others.

3. Diphtheria, tuberculosis and typhoid fever, preventable diseases, are responsible for more deaths than any other three diseases. They may, however, occur in such mild and masked forms that a correct diagnosis can only be made by means of the microscope.

A verification of the clinical diagnosis in a supposedly tuberculous case will materially benefit not only the patient, but indirectly every one associated with him. Often persons infected with tuberculosis go on in fair health for a long time, with very slight cough and expectoration, never realizing their own condition, nor that they are a source of danger to others. It is especially this class of patients in whose sputum tubercle bacilli are found long before their physical symptoms become at all severe. Such persons, following their daily occupations, may be a prolific but unrecognized source of infection for months or even years.

The statistics of this Laboratory show many interesting cases, and by way of illustration we cite a few instances. The following cases were selected from 100 successive examinations during June, 1907, and only those where very large numbers of tubercle bacilli were found are mentioned.

Case 1.—Male, white; age 20 years. Occupation, college student. Earliest symptoms began eight months ago. Clinical diagnosis, bronchitis.

Case 2.—Female, white; age 21 years. Occupation, housework. Brother died in the winter of 1904-05. Thinks she was in fair health until three months ago.

Case 3.—Male, white; age 45 years. Occupation, grocer. Wife died of tuberculosis in 1904 and soon after he began to fail in health. Did not consult a physician until June, 1907.

Case 4.—Male, white; age 40 years. Occupation, druggist. Has had "bronchial" trouble for ten years.

Case 5.—Female, white; age 39 years. Two uncles and one sister died of tuberculosis. Patient has been in poor health for six months or more, but did not until recently consult a physician.

Case 6.—Male, white; age 59 years. Five of his brothers and one nephew died of tuberculosis. Patient has had a cough for at least five years. No clinical diagnosis was made.

Case 7.—Female, white; age 52; married. Her father, mother and several brothers died of tuberculosis. This case was diagnosed "Asthma." Duration, ten years.

Case 8.—Female, white; age 26. Occupation, stenographer. Failing in health gradually for one and a half years. Had been under a physician's care for some time until June, 1907. Tuberculosis was not suspected. Patient was still working at the time of sputum examination.

Case 9.—Male, white; aged 33 years. Occupation, advertising agent. His mother died of tuberculosis sixteen years ago. Patient has been troubled with a cough for several years, attributed his failing health to overwork. Consulted a different physician occasionally, but none had made a diagnosis of tuberculosis.

Case 10.—Male, white; aged 45. Occupation, floorwalker in a department store. Complained of a cough for at least ten months. Clinical diagnosis, "Bronchitis."

The statistics of this Laboratory show that many respiratory troubles in patients past 45 years of age are diagnosed as chronic bronchitis and treated as such, often for a long time, and when finally a sputum examination is resorted to, the case proves to be tuberculosis.

The same danger encountered with regard to tuberculosis we find in typhoid fever. Cases of this infection may be so mild, or the symptoms so atypical, that it is impossible to make a clinical diagnosis with certainty.

It is known that typhoid bacilli are always present in the excreta of persons infected with this disease, notwithstanding the fact that the symptoms are of the mildest type, and it has also been proved that these bacilli are discharged for some time, several months even, after the patient has apparently recovered, leaving him still a source of infection. We can readily see, therefore, that it is of the utmost importance that an early and correct diagnosis of typhoid fever is made, especially in light cases, and this can best be done by the Widal reaction. This reaction gives correct results in 96 per cent. of cases of typhoid fever, and by means of it we have repeatedly been able to discover epidemics of this infection when many of the cases were of a mild type, or presented atypical symptoms. We have had no opportunity to investigate any extensive epidemics this year, but specimens came in from nearly every county in the State. The number of Widal tests made in this Laboratory per month varies somewhat, according to the season.

The Laboratory of Bacteriology has, we believe, given considerable assistance in the prevention of diphtheria. In this infection, as in typhoid fever, the mild cases constitute the greatest danger to a community. They are either overlooked entirely or treated as simply pharyngitis and not until severe cases make their appearance do people realize that diphtheria has been in their midst for some time and gained a strong foothold.

The statistics of this Laboratory show that physicians do not send specimens from mild cases of sore throat until there have been some in which the symptoms were severe enough to be clinically recognized as diphtheria. The so-called "first cases" from any locality which we find in our records are all quite severe, but in nearly every instance we have been able to get from the attending physician a report to the effect that a series of very mild cases of pharyngeal inflammation preceded the severe one.

A survey of 150 cases where a microscopical diagnosis of diphtheria was made, reveals the fact that only in 46 per cent., i. e., less than half of the entire number, the clinical diagnosis was diphtheria, 22 per cent. were diagnosed as tonsillitis. In 27 per cent. the physician stated that he had not made any diagnosis. Five per cent., usually in infants, were diagnosed as croup.

Often it occurs that physicians send a specimen for release from quarantine four or five days after the first suture. We do not believe that this is at all safe, because an examination may give a negative result because antiseptics have been used in the throat, and we therefore repeatedly advise that cultures be prepared from

the nose also. In all cases where this was done we found that diphtheria bacilli could still be cultivated from the posterior nares when the preparations made from the fauces and posterior wall of the pharynx were entirely negative. The following cases we believe worthy of being reported here:

Case 1.—Miss X——, a teacher in whose class several cases of diphtheria had occurred, developed a pharyngitis. Her physician finding only a slight redness of the tonsils, no membrane or exudate present in the throat, made a diagnosis of tonsilitis and treated it as such. The constitutional symptoms of this case were very slight and the patient was able to follow her vocation. The health officer, upon hearing of the case, went to investigate and sent a specimen of the exudate from the patient's throat for microscopical examination, which disclosed the fact that diphtheria bacilli were responsible for this trouble.

Case 2.—During the last week of April, 1907, a child in the family of Mr. L—— died, of what was believed to be measles, with laryngeal involvement. April 30, Anna, age 5 years, developed the same symptoms and the family physician again diagnosed measles. On May 9 another physician was called to see the child. When he arrived the little girl had just died, and on examination of the body a thick membrane was found covering fauces and tonsils. An immediate diagnosis of diphtheria was verified by a microscopical examination.

Case 3.—Miss A——, age 20 years. Physician's diagnosis of this was tonsilitis, but he sent some mucus from the inflamed area to be examined. Diphtheria bacilli were found to be causing this inflammation. Careful inquiry disclosed the fact that a sister of the patient had been exposed to diphtheria and began to complain about a sore throat one week before. Three other sisters fell ill with the same disease the day before this patient was stricken.

Case 4.—This is one of the most interesting instances we have to report. Mr. ——, 57 years of age, developed a very sore throat, September 19, 1907. A physician saw him September 21, and diagnosed the case as one of quinsy, the left tonsil being badly swollen. Later the right side was affected and the abscess apparently opened, as considerable quantities of pus were expectorated. September 25, the patient began to cough up membrane and was very sick during the night. September 26, the physician saw him early in the morning and found him much improved. A large quantity of membrane had been expectorated during the night. The physician took some of this membrane away with him in order to have it

examined. About noon a message came to the physician that the man was dying, and when he reached the bedside the patient was cyanotic and giving all symptoms of asphyxiation, dying shortly after. A test tube full of the expectorated material which we received contained large masses of membrane, some pieces shaped like casts of very small bronchi. The largest piece was 38 mm long, 25 mm wide and varied in thickness from 2 to 4 mm. On microscopical examination it was found to consist of fibrinous material, holding in its meshes diphtheria bacilli. The piece was ring-shaped and, judging from its shape, came from the bifurcation of the trachea. Very few bacteria except diphtheria bacilli were found.

Following is a report of the work done during each month, with tables showing the kind of work and number of examinations of each, also short conclusions. Other tables show the number of examinations made from each county:

November, 1906.—The statistics of this Laboratory for November show an increase in the number of specimens examined. This increase is due to the numerous cases of diphtheria occurring in the State. Wabash seems to have suffered severely, judging from the number of cultures showing diphtheria bacilli which were received from that town. In like manner have also Ladoga, Anderson, Earl Park and Kokomo. Many cultures were received from rural districts. We notice that many of the cultures which contained diphtheria bacilli were taken from cases where no membrane was present in the throat and few constitutional symptoms. The fact that these cultures are now received more frequently than formerly is very gratifying to the workers in this Laboratory, because we know if the physicians make use of this Laboratory in the diagnosis of all mild cases, the spread of diphtheria will be considerably diminished in a short time.

The number of examinations of sputum does not differ much from that of the preceding months. There were, however, more specimens of urine submitted. In only one of the thirteen specimens of urine submitted, tubercle bacilli were found, and as we have not been able, under the present conditions, to keep guinea pigs for inoculation, the remaining twelve cases are still doubtful, because the only certain way was to demonstrate tubercle bacilli in urine, when present in small numbers, is by the method of animal inoculation.

Several specimens of worms were also received. Most of these were found by farmers preparing sour kraut. All of these were the so-called horse hair snakes (*Gordius*), and not dangerous.

EXAMINATION FOR BACILLUS TUBERCULOSIS.

Sputum—		
Positive	60	
Negative	104	
	—	164
Urine—		
Positive	1	
Negative	12	
	—	13
Feces—		
Negative	1	1
Stomach contents—		
Negative	1	1
Pus—		
Negative	1	1
Pleuritic fluid—		
Negative	1	1
Gland (human)—		
Positive	1	1
	—	182

WIDAL TEST FOR TYPHOID FEVER.

Blood—		
Positive	31	
Negative	37	
	—	68

EXAMINATIONS FOR BACILLUS DIPHThERIAE.

Culture from throat—		
Positive	70	
Negative	72	
Unsatisfactory	8	
	—	150

EXAMINATIONS FOR MALARIA.

Blood—		
Positive	2	2

MISCELLANEOUS.

New Growths—		
Adenoma	1	
Carcinoma	2	
Sarcoma	3	
Papilloma	1	
	—	7

Glanders (horse)—		
Negative	1	1
Urine for gonococci—		
Positive	1	1
Worms—		
Gordius	3	3
Larvae of botfly	1	1
	—	13
Total number of specimens		415

OUTFITS SENT OUT.

Sputum	172
Blood outfits for Widal tests.....	94
Serum cultures for diphtheria	199
Outfits for examination of blood for malarial parasites.....	3
	— 468

December, 1906.—The total number of specimens examined during the month of December is considerably lower than that for November. This is mostly due to the difference in the number of diphtheria cultures examined. We believe there is fully as much, if not more, diphtheria in Indiana than was last month, but many cases are light and therefore may easily pass without recognition; others so severe that a clinical diagnosis seems sufficient to the attending physician and he does not ask for a microscopical examination.

Typhoid fever is still in evidence, more than half of the number of blood examinations giving a positive result.

The number of miscellaneous specimens examined has been unusually high. Cases of hydrophobia appear occasionally and one of them we had the opportunity of examining this month. The history developed that in the same town from which this specimen came a dog showed symptoms of hydrophobia in August, 1906, and bit another dog and some hogs. The latter developed the disease and were killed; the dog, which had also been bitten, left alive. This same animal developed hydrophobia in September, biting two other dogs, one of which again developed the infection on the ninth day and was promptly killed. The other dog, whose head we examined September 30, was allowed to live because "it did not show any symptoms of disease." Why people would let an infection go on in such a manner is hard to understand, yet we find it occurring again and again.

EXAMINATIONS FOR BACILLUS TUBERCULOSIS.

Sputum—		
Positive	43	
Negative	89	
	—	132
Typhoid fever—		
Positive	17	
Negative	10	
Unsatisfactory	1	
	—	28
Diphtheria—		
Positive	30	
Negative	33	
Unsatisfactory	2	
	—	65
Malaria—		
Negative	1	1
Water	1	1
Miscellaneous specimens	18	18
	—	
Total examinations		245

OUTFITS SENT OUT.

Sputum	198
Blood outfits for Widal tests	120
Serum cultures for diphtheria	182
Outfits for examination of blood for malarial parasites..	0
	— 500

January, 1907.—This month has brought very little of importance in our routine work, but a change has been made in the outfits in order to get permission to ship them through the mail. The new outfits are considerably heavier than those we had before, and therefore will require more postage. The new outfits for diphtheria have been changed further in so far as no culture media accompany them, but a cotton swab inoculated from the throat is sent for examination. This will in some instances lengthen the time which must necessarily elapse before a report can be made to the physician, but in many cases we can report by telegraph or telephone very soon after the specimen reaches the Laboratory, because the preparations made from the swab show an almost pure culture of diphtheria bacilli.

The increase in the number of examinations of tuberculous sputum is very slight, but considerably more Widal tests have been made during January than in the preceding month.

Sputum—	
Positive	71
Negative	108
	— 179
Typhoid fever—	
Positive	30
Negative	15
Unsatisfactory	2
	— 47
Diphtheria—	
Positive	18
Negative	36
Unsatisfactory	5
	— 59
Miscellaneous specimens	14
	—
Total number of examinations	299

OUTFITS SENT OUT, JANUARY, 1907.

Sputum	268
Blood outfits for Widal tests.....	116
Diphtheria outfits	122
	— 506

February, 1907.—While the number of sputum examinations remains nearly stationary, the Widal tests for this month have increased considerably.

Six samples of water and four samples of milk were examined during February, but this kind of work is not as much in demand as it properly should be.

We are now in position to make guinea pig injections to determine the presence of tubercle bacilli in pleuritic fluid, etc., and to also verify the microscopical findings in cases of supposed Rabies. A number of rabbits and guinea pigs were bought last month and these animals will be used for the above purposes.

Sputum—	
Positive	77
Negative	133
	— 210
Typhoid fever—	
Positive	35
Negative	23
	— 58
Diphtheria—	
Positive	7
Negative	23
Unsatisfactory	1
	— 31

Malaria—

Negative	1	1
Water	6	6
Milk	4	4
Miscellaneous specimens	5	5
		<hr/>
Total number of examinations.....		315

OUTFITS SENT OUT.

Sputum	286
Blood outfits for Widal tests.....	124
Diphtheria	135
—	545

March, 1907.—The routine work in this Laboratory is gradually increasing. We have had more specimens of diphtheria than during February, and the many colds contracted this month necessitated many sputum examinations.

An epidemic of hydrophobia occurring in Greencastle, Putnam County, is interesting enough to be reported in detail:

On February 24 a dog showing symptoms of hydrophobia bit two cows and a number of hogs; one of the latter died on the third day. The dog was, upon the request of the health officer, Dr. W. H. Hutcheson, confined and the progress of the malady watched. The animal died on March 1, and its head was sent to the Laboratory of Bacteriology, where microscopical examination verified the diagnosis of hydrophobia. The hogs, seventeen in number, which had been duly quarantined, were attacked by the disease on March 22, and were all shot. Two cows and one hog, bitten at the same time, had shown no symptoms when we had the last communication from Dr. Hutcheson, March 30.

Sputum—

Positive	54
Negative	174
	<hr/>
	228

Typhoid fever—

Positive	8
Negative	32
	<hr/>
	40

Diphtheria—

Positive	20
Negative	25
	<hr/>
	45

Malaria—

Negative	2	2
Water	5	5
Milk	6	6
Miscellaneous specimens	21	21
	— 347	

OUTFITS SENT OUT MARCH, 1907.

Sputum	275
Blood outfits for Widal tests	132
Diphtheria	140
	— 547

April, 1907.—Little is to be said of this month. The number of specimens to be examined for typhoid fever is very little higher than that of March, but the way in which the specimens are prepared is often unsatisfactory. Physicians persist in sending so very small drops of blood that it is almost impossible to make a correct dilution. Such reactions will, of course, be doubtful and no accurate conclusions can be drawn.

Eight thousand (8,000) units of diphtheria antitoxin were shipped to a physician for use on a little patient whose parents were too poor to pay for it.

There seems to be more hydrophobia in Indiana than people as a rule believe to be the case. We have examined the brain of four dogs during the month of April. In three of the specimens Negri bodies were found and results were verified by injections of some of the brain substance into guinea pigs, all of which died. The fourth specimen contained no Negri bodies and the guinea pig injected remained perfectly healthy.

Sputum—

Positive	68
Negative	133
	— 201

Typhoid fever—

Positive	17
Negative	27
Unsatisfactory	1
	— 45

Diphtheria—

Positive	11
Negative	17
	— 28
	— 274

Water	1	1
Milk	3	3
Miscellaneous specimens	13	13
		<hr/> 17
Total number examinations	291	

OUTFITS SENT OUT.

Sputum	373
Blood for Widal tests	154
Diphtheria	179
	<hr/> 706

May, 1907.—We have not observed any cases of special interest this month. Only twenty-one specimens of blood from cases of suspected typhoid fever were received for examination. Six samples of water and one sample of milk were also examined.

People rarely ever think of inquiring into the conditions of their water supply until they have had several cases of typhoid fever in the community. Since the Laboratory of Bacteriology has no special medical inspectors who could be sent into the infected districts to collect and send specimens from every case suspected of having typhoid fever, we are entirely dependent upon the physicians for such work, and it has been our experience that it is rare for them to send specimens from the mild and atypical cases, i. e. in whom the symptoms last a short time only and the fever curve is not pronounced. The statistics collected last year, during the summer when several epidemics were in progress, demonstrate conclusively that while a number of persons infected with typhoid fever have not developed the typical form of this disease, the anti-toxic properties upon which is based the principle of the Widal reaction have been formed in the blood of these persons and the previous infection can easily be recognized.

The number of specimens of supposedly tuberculous sputum remains nearly stationary from month to month. We are making some efforts to reach more of the physicians of this State and find a slow but sure increase in the number of new names appearing upon our records.

Sputum—

Positive	85
Negative	144
	<hr/> 229

Typhoid fever—			
Positive	5		
Negative	16		
		—	21
Diphtheria—			
Positive	13		
Negative	12		
		—	25
Water	6	6	
Milk	1	1	
Miscellaneous specimens	14	14	
		—	
Total number of examinations			296

OUTFITS SENT OUT.

Sputum	232		
Blood for Widal tests	85		
Diphtheria :	114		
Malaria ..,	43		
		—	474

June, 1907.—We notice that hydrophobia is still present in Indiana, having received one dog's head during this month. Negri bodies were found present in the brain and the person bitten by the dog was advised to go to a Pasteur Institute for treatment.

Aside from the usual number of examinations for tuberculosis, typhoid fever and diphtheria, we have examined several blood smears for malarial parasites. The unsatisfactory way in which specimens are prepared makes such work very discouraging. The instructions which accompany each outfit are rarely ever followed, and physicians as a consequence are disappointed in the results of the examinations.

A small bottle full of soil was sent to the Laboratory for examination in order to determine if it contained tetanus bacilli. A small boy had injured his foot through a splinter and a short time afterward died in convulsions. Several physicians attended the case, some contending for tetanus, others against it. The specimen of soil was taken from the woodshed where the injury occurred and when inoculated into the proper culture media, a pure culture of tetanus bacilli was obtained. The culture was tested by the inoculation of a guinea pig, which died in three days of tetanus.

Sputum—			
Positive	71		
Negative	123		
		—	194

Typhoid fever—

Positive	8	
Negative	16	
Unsatisfactory	3	
	—	27

Diphtheria—

Positive	15	
Negative	10	
	—	25

Malaria—

Positive	1	
Negative	6	
	—	7

Water 9 9

Anemia—

Negative	2	2
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Miscellaneous specimens 13 13

Total number of examinations 277

OUTFITS SENT OUT.

Sputum	317	
Blood outfits for Widal tests	86	
Diphtheria	104	
Malaria	53	
	—	560

July, 1907.—In comparison to last month, we note an increase in the number of specimens of suspected diphtheria, nearly three-fourths of which contained Klebs-Loeffler bacilli.

Tuberculosis is always responsible for the largest amount of our work, and we are sure we do not get an opportunity to examine one-tenth the number of cases present in any locality, because there are still so many physicians who never make use of our facilities.

We have also made a few more examinations of blood from suspected cases of typhoid fever, but very few of them gave a positive result.

Sputum—

Positive	80	
Negative	139	
	—	219

Typhoid fever—

Positive	31	
Negative	53	
	—	84

Diphtheria—		
Positive	27	
Negative	10	
	—	37
Malaria—		
Positive	1	
Negative	3	
	—	4
Water	10	10
Milk	2	2
Miscellaneous specimens	15	15
	—	
Total number of examinations		371

OUTFITS SENT OUT.

Sputum	324
Blood outfits for Widal tests	121
Diphtheria	190
Malaria	59
	— 694

August, 1907.—We have received more samples of water this month than heretofore. There were 59 samples and a large per cent.—22—were unfit for drinking purposes.

Of the blood specimens tested for the Widal reaction, a large number gave a negative result, some because the drops submitted were too small, others because the disease was probably a non-typhoidal affection.

Plasmodium Malariae was not found in any of the seven specimens received.

Sputum—	
Positive	75
Negative	119
	— 194
Typhoid fever—	
Positive	13
Negative	113
	— 126
Diphtheria—	
Positive	8
Negative	5
	— 13
Malaria—	
Positive	0
Negative	7
	— 7

Water—

Good	28	
Fair	9	
Bad	22	
		— 59
Milk	7	7
Miscellaneous specimens	25	25
		—
Total number of examinations		431

OUTFITS SENT OUT.

Sputum	205
Blood outfits for Widal tests.....	134
Diphtheria	50
Malaria	25
Water	60
	— 474

September, 1907.—The number of blood specimens to be examined for the Widal reaction was higher this month, not very many, however, giving a positive result.

Samples of water from different parts of the State arrived at the Laboratory, their number amounting to 44, of which 18 were non-potable.

A serious condition is arising in this State with regard to diphtheria infection. While there have been some cases occurring every month, a decided increase has become noticeable in September. This, we feel sure, is due to the fact that schools convene this month. Of 43 specimens submitted, 38 contained diphtheria bacilli, and unless prompt and severe means are employed to check the spread of this disease, we predict epidemics of considerable magnitude for the coming winter. We are now warning physicians of the danger and advising that specimens be sent to this Laboratory at once from every case suspected.

Sputum—

Positive	76
Negative	110
	— 186

Typhoid fever—

Positive	30
Negative	113
	— 143

Diphtheria—

Positive	38
Negative	5
	— 43

Malaria—

Positive	1	
Negative	12	
Unsatisfactory	3	
	—	16
Water	44	44
Miscellaneous specimens	12	12
		—
Total number of examinations		444

OUTFITS SENT OUT.

Sputum	324
Blood outfits for Widal reaction	150
Diphtheria	141
Malaria	26
Water	50
	— 691

October, 1907.—The steady increase in the number of specimens examined at the Indiana State Laboratory of Bacteriology seems to be an indication that this department serves to some degree the purpose for which it was created. When we consider the fact that each examination in this Laboratory is equal to so much assistance rendered to both physician and patient, frequently meaning the saving of human life, we have reason to believe that this Laboratory will in time become one of the greatest factors in the prevention of infectious diseases in the State of Indiana.

We have received specimens from a very small percentage of the physicians practicing in this State, but many new names have recently appeared on our records. While the process of getting acquainted with the practitioners has been somewhat slow, we are proud to record the fact that any one of them once availing himself of our services has found our assistance helpful in his work.

During the past month we have examined 188 specimens of sputum, of which a large percentage did not contain tubercle bacilli. This is due to the fortunate fact that physicians now send specimens of sputum as soon as there is the slightest suspicion that the case might be of tubercular origin. The contrast noted in our experience of two years ago is rather striking. At that time practically every specimen which we received contained tubercle bacilli; now, even with the aid of a centrifuge and the most painstaking examination, it is sometimes necessary to search two or three, in one case even five, successive samples of sputum before tubercle bacilli were discovered. It can readily be seen that cases recog-

nized early not only will react more satisfactorily to treatment, but the danger of infection to persons associated with the patient is greatly lessened because the latter can be cautioned and educated properly before his carelessness has resulted in the infection of his surroundings.

The typhoid fever situation is as serious as ever, though the Laboratory did not receive quite as many specimens of blood as last month, the difference being twenty-seven more in September, yet there are nearly half of the cases examined in October in which the Widal reaction was positive. If we could apply the Widal test to blood from all persons living in a locality where typhoid fever has occurred, who are suffering from anemia, malaise, indigestion, so-called summer complaint, etc., we would find that there is a large number of cases of a mild ambulatory typhoid fever not ordinarily recognized as such. At least this has been our experience in several epidemics which were carefully inquired into.

The number of examinations made with regard to the presence of diphtheria has greatly increased over that of any month since November, 1906. We know that every year soon after school begins, mild cases of sore throat occur among the children. Occasionally a patient gets so sick that the physician becomes suspicious of diphtheria, but "there being no diphtheria in the community," if there is no membrane formation, no special attention is paid to it. A large number of these cases are undoubtedly diphtheria of a mild type which eventually precipitate some epidemic. There are several epidemics in progress now. At Plainfield the cases are mostly of a light character, but a few patients developed very grave symptoms. From Albion, Brazil, Muncie, Larwill and Fort Wayne specimens of diphtheria have been received, and we have urged the physicians to make frequent use of this Laboratory for the benefit of their respective communities.

We have begun to make an effort to interest the physicians in a general crusade against diphtheria by a careful examination of all cases of pharyngitis coming under their supervision. The facilities of this Laboratory are such that we can handle the increased number of specimens which this procedure would bring without any delay.

Sputum—

Positive	70
Negative	118
	— 188

Typhoid fever—

Positive	48	
Negative	68	
	—	116

Diphtheria—

Positive	80	
Negative	35	
	—	115

Malaria—

Positive	1	
Negative	4	
	—	5

Miscellaneous specimens 18 18

Water 27 27

Milk 3 3

Total number of examinations 472

OUTFITS SENT OUT.

Sputum 373

Blood outfits for Widal reaction 160

Diphtheria 186

Malaria 14

Water 24

— 757

SPUTUM EXAMINATIONS—COUNTIES.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Adams	11	22	33
Allen	21	30	51
Bartholomew	36	62	98
Benton	5	8	13
Blackford	10	15	25
Boone	10	19	29
Brown .....	..	..	..
Carroll	9	12	21
Cass	7	12	19
Clark	6	16	22
Clay	9	9	18
Clinton	6	25	31
Crawford	6	5	11
Daviess	5	10	15
Dearborn	1	5	6
Decatur	8	17	25
Dekalb	4	14	18
Delaware	17	32	49
Dubois .....	..	..	..
Elkhart	10	30	40
Fayette	3	8	11

SPUTUM EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Floyd	7	11	18
Fountain	8	14	22
Franklin	1	..	1
Fulton .....	..	..	..
Gibson	6	11	17
Grant	21	37	58
Greene	1	3	4
Hamilton	13	32	45
Hancock	13	18	31
Harrison	4	8	12
Hendricks	29	52	81
Henry	36	27	63
Howard	9	17	26
Huntington .....	..	..	..
Jackson	18	27	45
Jasper	6	14	20
Jay	12	14	26
Jefferson	6	13	19
Jennings	3	2	5
Johnson	7	15	22
Knox	12	34	46
Kosciusko	6	12	18
Lagrange	9	24	33
Lake	1	4	5
Laporte	10	25	35
Lawrence	1	..	1
Madison	36	34	70
Marion	145	42	187
Marshall	3	4	7
Martin	8	2	10
Miami .....	..	6	6
Monroe	1	2	3
Montgomery	16	14	30
Morgan	4	1	5
Newton	1	1	2
Noble	6	22	28
Ohio .....	..	..	..
Orange .....	..	..	..
Owen	2	4	6
Parke	5	14	19
Perry	3	2	5
Pike	3	3	6
Porter .....	..	..	..
Posey	5	12	17
Pulaski	4	11	15
Putnam	6	12	18
Randolph	10	43	53
Ripley	2	4	6

SPUTUM EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Rush	8	9	17
Scott .....	..	2	2
Shelby	1	2	3
Spencer	3	14	17
Starke	5	14	19
Steuben .....	..	2	2
St. Joseph	1	3	4
Sullivan	10	12	22
Switzerland	2	5	7
Tippecanoe	3	26	29
Tipton	10	7	17
Union	3	7	10
Vanderburgh	14	17	31
Vermillion	8	18	26
Vigo	7	19	26
Wabash	5	15	20
Warren	1	..	1
Warrick	1	..	1
Washington	3	3	6
Wayne	40	65	105
Wells	5	14	19
White	8	12	20
Whitley	9	22	31
	830	1,286	2,116

WIDAL EXAMINATIONS MADE WITH THE BLOOD OF SUSPECTED
TYPHOID FEVER CASES.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatis- factory.</i>	<i>Total.</i>
Adams	1	5	..	6
Allen	8	29	..	37
Bartholomew	8	14	..	22
Benton .....	..	1	..	1
Blackford	5	..	..	5
Boone .....	..	2	..	2
Brown .....	..	..	..	..
Carroll	1	4	..	5
Cass .....	..	1	..	1
Clark .....	..	..	..	..
Clay	1	8	..	9
Clinton	3	7	..	10
Crawford .....	..	..	..	..
Daviess .....	..	..	..	..
Dearborn	1	4	..	5
Decatur	3	3	..	6
Dekalb .....	..	..	..	..

WIDAL EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Delaware .....	..	2	..	2
Dubois .....	..	..	..	..
Elkhart	2	3	..	5
Fayette	2	2	..	4
Floyd	1	3	..	4
Fountain	3	2	..	5
Franklin .....	..	..	..	..
Fulton .....	..	..	..	..
Gibson .....	..	..	..	..
Grant	20	27	..	47
Greene	2	..	..	2
Hamilton	6	12	..	18
Hancock	2	5	..	7
Harrison .....	..	..	..	..
Hendricks	4	18	1	23
Henry	5	5	..	10
Howard .....	..	..	..	..
Huntington .....	..	1	..	1
Jackson	4	7	..	11
Jasper	2	2	..	4
Jay	2	1	..	3
Jefferson	2	5	..	7
Jennings	2	3	..	5
Johnson	5	3	..	8
Knox	2	2	..	4
Kosciusko	1	9	..	10
Lagrange .....	..	..	..	..
Lake	1	2	..	3
Laporte	17	20	..	37
Lawrence .....	..	..	..	..
Madison	4	24	1	29
Marion	80	145	2	227
Marshall	2	4	..	6
Martin .....	..	2	..	2
Miami .....	..	1	..	1
Monroe .....	..	..	..	..
Montgomery	2	3	1	6
Morgan	1	1	..	2
Newton	1	1	..	2
Noble	3	12	..	15
Ohio .....	..	..	..	..
Orange .....	..	..	..	..
Owen .....	..	3	..	3
Parke .....	..	1	..	1
Perry	2	7	..	9
Pike .....	..	..	..	..
Porter .....	..	1	..	1

WIDAL EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Posey	1	..	..	1
Pulaski	1	3	1	5
Putnam	3	3	..	6
Randolph	13	21	..	34
Ripley .....	..	..	..	..
Rush	2	..	..	2
Scott .....	..	..	..	..
Shelby .....	..	3	..	3
Spencer	9	21	..	30
Starke	2	4	..	6
Steuben .....	..	..	..	..
St. Joseph	2	4	..	6
Sullivan .....	..	2	..	2
Switzerland .....	..	1	..	1
Tippecanoe	3	7	..	10
Tipton	1	3	..	4
Union	1	1	..	2
Vanderburgh	3	2	1	6
Vermillion .....	..	1	..	1
Vigo	2	3	..	5
Wabash .....	..	..	..	..
Warren .....	..	..	..	..
Warrick .....	..	..	..	..
Washington .....	..	..	..	..
Wayne	14	23	..	37
Wells	2	2	..	4
White	1	2	..	3
Whitley .....	..	..	..	..
	<hr/> 271	<hr/> 523	<hr/> 8	<hr/> 802

DIPHTHERIA BY COUNTIES.

Adams	1	..	..	1
Allen	6	1	..	7
Bartholomew .....	..	1	..	1
Benton	17	30	1	48
Blackford .....	..	3	..	3
Boone	3	1	..	4
Brown .....	..	..	..	..
Carroll .....	..	1	..	1
Cass	1	..	..	1
Clark .....	..	1	..	1
Clay	6	6	1	13
Clinton	1	..	..	1
Crawford .....	..	..	..	..
Daviess .....	..	1	..	1

DIPHTHERIA—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Dearborn .....	..	..	..	..
Delaware	71	55	2	128
Dubois .....	..	..	..	..
Elkhart	1	..	..	1
Fayette .....	..	..	..	..
Floyd	1	..	..	1
Fountain .....	..	..	..	..
Franklin .....	..	..	..	..
Fulton .....	..	..	..	..
Gibson .....	..	..	..	..
Grant	3	3	..	6
Greene .....	..	..	..	..
Hamilton	6	1	..	7
Hancock	3	..	..	3
Harrison	3	..	..	3
Hendricks	34	22	1	57
Henry	2	1	..	3
Howard	3	3	1	7
Huntington	4	1	..	5
Jackson .....	..	..	..	..
Jasper	2	1	..	3
Jay .....	..	..	..	..
Jefferson	3	3	..	6
Jennings	6	4	..	10
Johnson .....	..	..	..	..
Knox	5	..	..	5
Kosciusko .....	..	..	..	..
Lagrange .....	..	..	..	..
Lake	6	..	..	6
Laporte .....	..	3	..	3
Lawrence	3	2	..	5
Madison	16	11	2	29
Marion	37	46	1	84
Marshall	4	..	..	4
Martin .....	..	..	..	..
Miami .....	..	..	..	..
Monroe .....	..	1	..	1
Montgomery	3	5	..	8
Morgan	3	..	..	3
Newton .....	..	2	..	2
Noble	4	1	..	5
Ohio .....	..	..	..	..
Orange .....	..	..	..	..
Owen .....	..	..	..	..
Parke	3	1	..	4
Perry .....	..	..	..	..
Pike .....	..	..	..	..

DIPHTHERIA—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Porter .....	..	..	..	..
Posey	3	4	2	9
Pulaski .....	..	..	..	..
Putnam .....	..	..	..	..
Randolph	11	14	2	27
Ripley .....	..	..	..	..
Rush	3	5	1	9
Scott .....	..	..	..	..
Shelby .....	..	..	..	..
Spencer	1	2	..	3
Starke .....	..	..	..	..
Steuben	1	..	..	1
St. Joseph .....	..	1	..	1
Sullivan	3	1	..	4
Switzerland .....	..	..	..	..
Tippecanoe .....	..	1	..	1
Tipton	12	4	..	16
Union	1	2	..	3
Vanderburgh .....	..	..	..	..
Vermillion	4	2	..	6
Vigo .....	..	1	..	1
Wabash	18	8	..	26
Warren .....	..	..	..	..
Warrick .....	..	..	..	..
Washington .....	..	..	..	..
Wayne	12	11	..	23
Wells	2	..	..	2
White	5	11	2	18
Whitley .....	..	2	..	2
	337	280	16	633

TOTAL NUMBER OF EXAMINATIONS.

Sputum	2,116
Typhoid	802
Diphtheria	633
Water	168
Milk	26
Anemia	2
Miscellaneous for T. B.	18
Miscellaneous	181
Malaria	45

3,989

Total number of outfits sent out..... 6,922

A study of the foregoing tables will show a difference in the number of specimens sent to the Laboratory of Bacteriology from different counties. The variations in this number are not altogether a result of different size or population of the respective counties, but rather depend upon the number of physicians in each county who make use of this Laboratory. It is to be remembered, however, that in Allen and Marion Counties the principal cities, Ft. Wayne and Indianapolis, have laboratories of their own.

We have tried during the two years since this Laboratory was created, to reach every physician in Indiana and invite his co-operation in the crusade against infectious diseases. The results have been especially satisfactory where we could meet the doctors personally and discuss the means which are best adapted to the needs of their respective communities. To meet the physicians personally, while it brings the best results and will do most to reduce the extent and frequency of epidemics in this State, has been made nearly impossible because of the limited number of employes in the Bacteriological Laboratory. If one of the number goes out to investigate an epidemic or to attend a medical meeting, the others must do more work than would tend toward accuracy. The character of the work done in this department is wholly different from that of any other line of business because in the majority of specimens submitted the life of the patient depends on the thoroughness with which the microscopical examination is conducted, the correctness of the diagnosis and speed with which results are reported to the physicians.

The tables of diphtheria by counties reveal a peculiar situation, the significance of which is of economic importance to this State. We refer to the fact that many counties are credited with more positives, i. e., specimens containing diphtheria bacilli, than those in which these bacteria were absent. This means that the health officers release patients from quarantine without making the attempt to determine with absolute certainty that the Klebs-Loeffler bacilli, which are the specific cause of diphtheria, have really disappeared from the nose and throat of every member of the infected household. This is a great mistake because we know that no one can tell merely by looking at a throat whether or not it contains Klebs-Loeffler bacilli. It is folly to suppose that every person in whose nose and throat these bacteria have found lodgment must necessarily develop the clinical symptoms of diphtheria. Physicians are too prone to consider a patient safe to be at large as soon as the inflammatory symptoms have subsided, and con-

stantly endanger their communities by releasing families from quarantine too early. There are several ways in which the State Laboratory of Bacteriology may help to solve the problem confronting the State of Indiana with regard to the prevention of infectious diseases. They are:

1. To communicate with every registered physician in this State and supply him with all the necessary outfits and instructions, when and how to send the specimens.

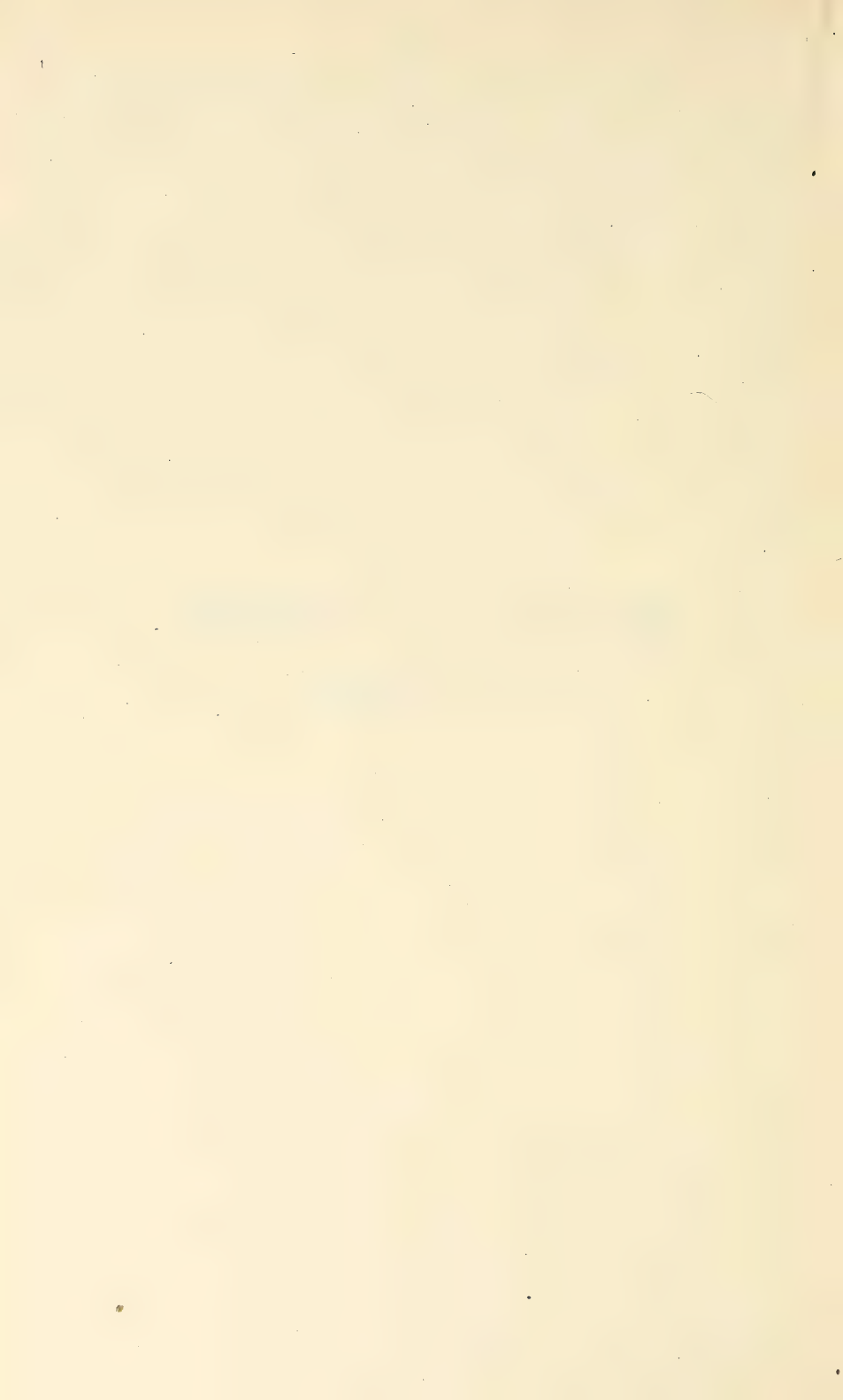
2. To have members of this department meet the physicians at their town and county societies to discuss the ways and means which will be best adapted to prevent infectious diseases in their localities.

3. To assist in the examination of school children in the public schools of any town or city, except such as have their own laboratories, immediately upon the detection of a case of diphtheria in a school.

4. To help in the education of the general public by occasional public demonstrations and exhibits of such character as will teach people to understand the nature of infectious diseases, their specific effects on the human body, and the best ways to prevent infection, the value of quarantine, etc. Such exhibits will be of use, not only to the laity, but also to the physicians and especially the health officers. When people realize that it is the infectious disease which the State Board of Health desires to put in quarantine and that all persons who have become the carriers of infection, regardless of the fact that they may apparently be in perfect health, **must** be prevented from spreading the disease.

STATISTICAL REPORT

FOR THE YEAR 1907.



REGISTRATION REPORT, 1907.

This report is for the calendar year 1907. The population figures are estimated from the census of 1900, according to the method of the United States Census Bureau.

In the following tables the causes of death are arranged according to the Bertillon classification, which has been adopted by all of the registration states of the country. This international classification was used by the United States Bureau of the Census in its last statistical compilation of causes of death.

Table 1 is a classification of all deaths with rates per 100,000 population, classified and arranged according to the international system.

Table 2 is a classification of deaths from all causes by months, ages, color, nationality and conjugal condition.

Table 3 gives deaths from all causes by counties, months, ages, color, nationality and conjugal condition.

Table 4 gives deaths from certain diseases by geographical sections and by counties.

Table 5 gives death rates for eight years, 1900 to 1908, with averages of cities of 5,000 population and over, compared with rural and state rates.

Table A gives births by counties, months, color and nationality of parents.

Table B gives births by counties, number of children born to each mother, grouped ages of parents, stillbirths, plurality and illegitimate births.

Table C gives, by counties, the marriages by months, color and nationality.

Table D gives, by counties, the marriages by grouped ages.

BIRTHS.

The number of births reported in the State of Indiana during the year 1907 was 49,112, of which number 25,627 were males and 23,485 females. Of the total males, 25,104 were white and 523 colored. Of the total females 22,995 were white and 490 colored. In the preceding year 45,300 births reported; males, 23,469; females, 21,831. October had the largest number of births, 4,544, and June the smallest, 3,203. March had the greatest number of deaths, 3,622, and June the lowest, 2,615. The births (49,112),

rate 18.0, exceed the deaths 36,461), rate 13.4 per 1,000 population.

The nationality of parents shows as follows: American-born fathers, 44,315; American-born mothers, 45,162. Foreign-born fathers, 3,284; foreign-born mothers, 2,268. Nationality not reported: Fathers, 1,017; mothers, 786.

Of the number of children born to each mother, 14,274 were first; 10,626, second; 7,575, third; 5,201, fourth; 3,677, fifth; 2,456, sixth; 1,760, seventh; 1,228, eighth; 751, ninth; 494, tenth; 291, eleventh; 274 were twelfth child and over, and 505 were not reported.

As to the ages of parents, 702 fathers and 5,276 mothers were under twenty years of age. In the age period of 50 to 60 there were 949 fathers and 19 mothers; age period 60 to 70, there were 126 fathers, and between 70 to 80 there were fifteen fathers.

One thousand two hundred and twenty-three stillbirths, also reported as deaths. The illegitimate births numbered 893, of which 469 were males, and 424 females. The plural births numbered 982, of which 532 were males and 450 females.

MARRIAGES.

Total marriages reported, 27,287. This is an increase over the preceding year of 1,062. October had the greatest number of marriages, 2,997, and March had the smallest number, 813. The general statistics on marriages will be found in Tables C and D.

DEATHS.

The total number of deaths reported in 1907 was 36,461, with a rate of 13.4. In the preceding year, 35,992 deaths, with a rate of 13.58. Males, 19,251; females, 17,210. White males, 18,402; colored, 759; white females, 16,509; colored, 701. American-born, 16,771 males, 15,443 females; foreign-born, 2,146 males, 1,588 females; nationality not reported, 334 males and 179 females. Single males, 8,773; females, 6,673; married males, 7,404; females, 5,884; widowed males, 2,741; females, 4,576; conjugal condition not reported, 303 males and 77 females.

The number of deaths, with rates for the years named, appear in the following table:

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
Deaths.....	35,516	36,544	34,069	33,892	37,240	36,502	35,992	36,461
Annual rate.....	14.1	14.5	13.5	13.4	14.0	13.7	13.5	13.4

Of the total number of deaths, 7,599, or 20.8 per cent. of the whole number, occurred in the first year of life. This is almost one-fourth of the total.

Two thousand two hundred and eighty-six deaths occurred in the age period of 1-5, making the total loss of children under 5 years of age, 9,885, or 27.3 per cent. of the total deaths. This is 20.0 per cent. of the total births reported. In the age period of 5 to 20 there were 2,371 deaths, or 6.5 per cent. of the total number. The total loss under 21 years of age is 12,256, or 33.6 per cent. of the total deaths. In the age period of 20 to 50, practically the prime of life, there were 8,173 deaths, or 22.4 per cent. of the total deaths. There were 402 deaths of persons over 90 years of age, an increase of 42 over 1906.

The following table, giving deaths by months, shows March with the greatest number of deaths, with January, February and August having about the same. June had the lowest number of deaths, as was the case in 1906:

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
3,126	3,413	3,622	2,961	2,914	2,615	3,133	3,376	2,887	2,820	2,671	2,923

February, March and April had the most tuberculosis deaths; February had most pneumonia; July and August were highest with diarrhoeal diseases, and August had the greatest number of typhoid deaths.

PRINCIPAL CAUSES OF DEATH FOR LAST EIGHT YEARS, WITH AVERAGE.

The following table gives the principal causes of death in their numerical order, for the past eight years, and also the yearly average for each cause, and Chart No. 1 gives a graphic representation of the principal causes for 1907:

PRINCIPAL CAUSES OF DEATH IN INDIANA FOR LAST EIGHT YEARS WITH AVERAGE.

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
1. Pulmonary tuberculosis.....	3,364	4,169	3,952	3,915	4,436	3,998	3,854	3,888	3,947
2. Pneumonia.....	2,744	3,384	2,758	2,634	3,487	3,124	2,890	3,258	3,035
3. Organic heart diseases.....	1,759	1,754	1,860	2,108	2,180	2,182	2,208	2,766	2,102
4. Accidents.....	1,334	1,463	1,391	1,601	1,622	1,795	1,796	1,981	1,623
5. Diseases of infants.....	1,361	1,247	1,183	1,318	1,726	1,908	1,766	1,783	1,536
6. Bright's disease.....	1,145	1,066	1,133	1,164	1,296	1,423	1,549	1,644	1,302
7. Infantile diarrhoea.....	2,049	1,776	1,779	1,449	1,629	1,700	1,823	1,639	1,718
8. Cerebral congestion and hemorrhage.....	1,056	1,264	1,272	1,346	1,435	1,351	1,496	1,599	1,352
9. Cancer.....	1,046	1,113	1,209	1,217	1,259	1,424	1,417	1,513	1,274
10. Typhoid fever.....	1,440	1,198	1,217	1,013	1,013	928	913	933	1,082
11. Other circulatory diseases.....	470	574	648	596	665	637	768	837	649
12. Paralysis.....	1,109	986	762	762	935	901	777	691	865
13. Influenza.....	424	1,049	302	348	434	591	224	666	504
14. Other forms of tuberculosis.....	1,281	493	440	477	542	494	602	634	620
15. Stomach diseases.....	676	704	641	613	561	678	699	617	648
16. Diarrhoea and enteritis.....	345	462	391	411	427	450	460	605	444
17. Broncho-pneumonia.....	228	480	417	416	672	535	576	585	488
18. Liver diseases.....	530	513	530	527	596	578	591	561	553
19. Other digestive diseases.....	686	682	605	519	530	498	524	491	564
20. Bronchitis.....	522	562	484	523	571	540	460	431	511
21. Simple meningitis.....	447	553	509	365	538	352	240	384	423
22. Suicides.....	196	254	278	254	283	338	321	361	285
23. Diphtheria and croup.....	746	555	424	462	314	366	402	353	452
24. Malformations.....	242	180	162	152	172	167	284	266	203
25. Other genito-urinary diseases.....	274	243	390	437	229	194	228	266	282
26. Diabetes.....	111	204	197	197	226	231	269	252	210
27. Other respiratory diseases.....	298	370	352	276	325	285	276	242	303
28. Dysentery.....	323	263	277	211	184	218	235	242	244
29. Simple peritonitis.....	325	354	366	311	375	338	265	222	319
30. Convulsions of infants.....	381	406	339	335	345	306	254	221	323
31. Measles.....	85	161	67	73	212	6	23	213	105
32. Appendicitis.....	125	137	145	163	164	194	174	205	163
33. Rheumatism.....	265	184	209	220	266	253	274	185	231
34. Cerebrospinal meningitis.....	391	236	187	341	347	460	481	180	328
35. Acute nephritis.....	223	142	150	191	207	189	230	169	187
36. Skin diseases.....	261	124	181	129	140	179	170	164	168
37. Whooping-cough.....	287	181	164	148	94	136	157	136	163
38. Diseases of female genital organs.....	107	85	87	85	91	88	112	123	97
39. Homicides.....	27	48	36	62	48	85	93	122	65
40. Scarlet fever.....	141	149	150	164	192	133	101	91	140
41. Malaria.....	374	197	161	131	116	116	102	81	159
42. Smallpox.....	19	21	75	195	97	35	8	8	57
Total.....	29,208	29,965	27,880	27,909	30,981	30,404	30,092	31,608	29,724

INDIANA PRINCIPAL CAUSES OF DEATH



CHART 1

TUBERCULOSIS.

HAVOC WROUGHT BY CONSUMPTION IN INDIANA IN 1904, 1905, 1906, 1907.

	1904.	1905.	1906.	1907.
Total consumption deaths.....	4,978	4,492	4,456	4,471
Male deaths.....	1,807	1,745	1,675	1,964
Female deaths.....	3,171	2,793	2,771	2,328
Mothers, age 18 to 40, prime of life.....	867	987	917	826
Fathers, age 18 to 40, prime of life.....	490	315	255	343
Orphans made under 12 years of age.....	2,703	2,694	2,353	2,340
Homes invaded.....	3,396	3,307	3,283	3,849

TUBERCULOSIS, ALL FORMS.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	417	389	402	368	420	419	415	373	400
February.....	422	440	389	350	414	407	394	428	405
March.....	454	433	459	445	550	461	443	449	461
April.....	455	449	444	411	459	426	439	455	442
May.....	405	420	405	383	502	391	398	384	411
June.....	394	348	323	363	400	361	331	356	359
July.....	382	394	320	373	397	361	329	377	366
August.....	392	403	331	340	390	355	367	389	371
September.....	343	309	353	354	347	306	307	340	332
October.....	366	350	305	306	365	326	344	327	336
November.....	316	357	320	333	352	326	346	315	333
December.....	399	370	345	388	582	353	343	329	388
Totals.....	4,745	4,662	4,396	4,414	5,178	4,492	4,456	4,522	4,604

TUBERCULOSIS, ALL FORMS.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	155	135	113	109	144	108	126	132	127
1-2 years.....	74	62	68	59	99	85	62	85	74
2-3 years.....	42	34	31	24	42	26	38	48	35
3-4 years.....	23	23	17	23	25	18	31	24	23
4-5 years.....	12	17	12	14	13	11	24	28	16
5-10 years.....	69	63	51	64	68	63	64	58	62
10-15 years.....	90	99	98	92	126	97	106	93	100
15-20 years.....	532	417	401	436	501	449	411	400	443
20-25 years.....	690	718	672	707	725	697	681	667	694
25-30 years.....	627	595	598	572	614	574	577	573	591
30-35 years.....	457	519	464	491	509	464	464	467	454
35-40 years.....	388	386	346	374	436	419	375	341	383
40-45 years.....	346	310	311	267	316	273	242	253	289
45-50 years.....	269	248	235	225	286	245	260	270	254
50-55 years.....	218	185	224	217	232	222	221	226	218
55-60 years.....	209	190	181	193	206	153	171	190	186
60-65 years.....	185	200	153	166	189	165	170	179	176
65-70 years.....	159	171	155	143	152	165	162	180	161
70-75 years.....	124	118	124	116	136	122	122	138	125
75-80 years.....	78	81	76	74	75	72	96	104	82
80-90 years.....	36	42	38	30	47	34	35	48	38
90 years and over.....		2	1	2	3		4	3	2

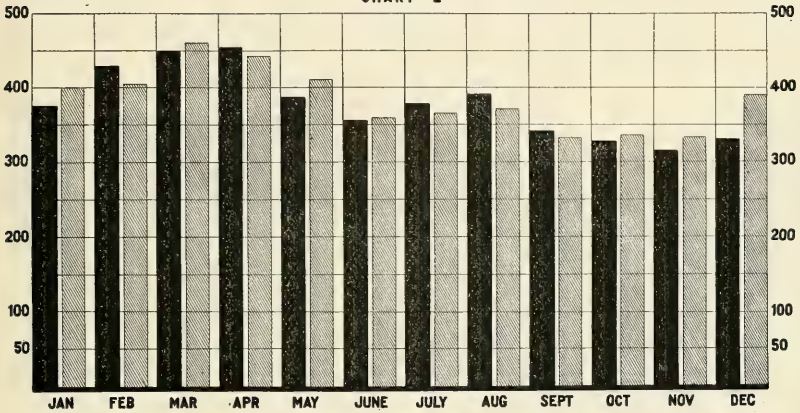
TUBERCULOSIS ALL FORMS

BY MONTHS

■ - 1907

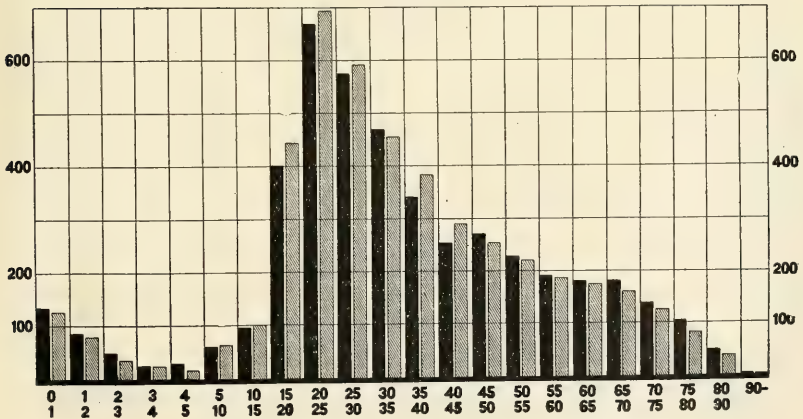
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 2



BY AGES

CHART 3



PULMONARY TUBERCULOSIS.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	300	368	358	324	379	395	359	330	351
February.....	300	390	353	318	372	379	349	392	356
March.....	318	388	416	399	485	421	391	396	401
April.....	339	408	409	365	409	380	386	392	436
May.....	266	378	368	339	448	346	337	329	351
June.....	301	310	297	326	359	330	282	303	313
July.....	244	349	295	325	358	310	284	314	309
August.....	271	254	300	293	332	308	312	312	297
September.....	212	266	296	318	302	263	253	286	274
October.....	274	302	266	261	322	266	289	276	282
November.....	248	321	288	297	317	287	302	276	292
December.....	291	335	306	352	353	313	310	282	317
Totals.....	3,364	4,069	3,952	3,915	4,436	3,998	3,854	3,888	3,979

PULMONARY TUBERCULOSIS.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	43	76	59	53	72	53	60	63	59
1-2 years.....	13	35	33	28	48	37	27	31	31
2-3 years.....	9	14	16	11	23	13	19	19	15
3-4 years.....	3	12	7	10	14	10	10	6	9
4-5 years.....	3	7	6	7	9	3	8	10	6
5-10 years.....	31	28	28	35	32	37	31	29	31
10-15 years.....	59	84	75	59	101	75	76	66	74
15-20 years.....	318	389	373	393	457	411	359	356	382
20-25 years.....	543	676	626	666	687	650	625	623	637
25-30 years.....	491	559	553	535	582	538	535	517	538
30-35 years.....	338	490	435	461	486	437	429	430	438
35-40 years.....	289	356	329	343	412	385	342	318	346
40-45 years.....	252	287	299	244	271	254	220	234	257
45-50 years.....	199	223	225	213	262	219	231	238	226
50-55 years.....	158	174	196	194	209	200	198	197	190
55-60 years.....	155	166	166	175	186	139	155	165	188
60-65 years.....	131	182	140	151	175	151	145	153	153
65-70 years.....	113	148	137	123	137	154	147	163	140
70-75 years.....	92	105	112	107	121	111	103	126	109
75-80 years.....	50	73	70	67	65	66	76	88	69
80-90 years.....	29	37	36	25	39	28	31	43	33
90 years and over.....		2	1	1	3		4	1	1

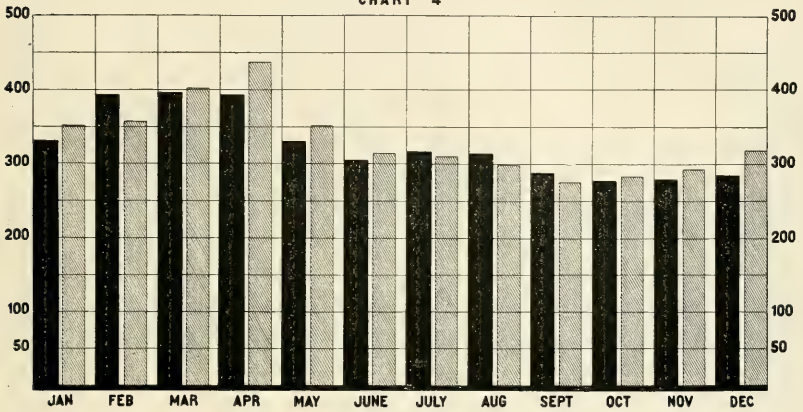
PULMONARY TUBERCULOSIS

BY MONTHS

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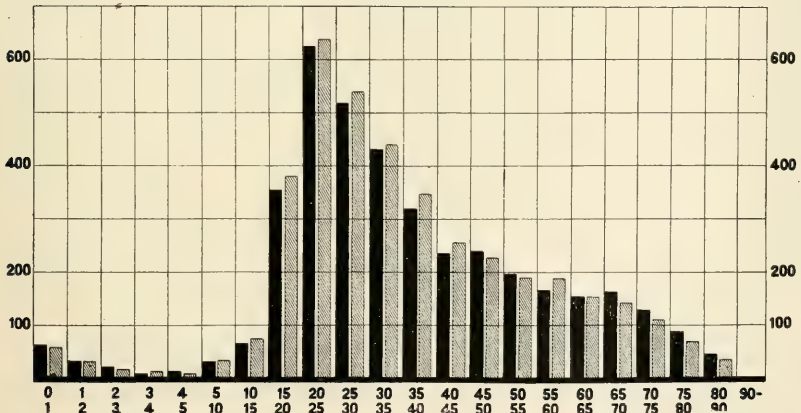
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 4



BY AGES

CHART 5



CONSUMPTION DEATH RATES PER 100,000 BY COUNTIES FOR 1907, IN INDIANA.

State rate, 166.5.

COUNTIES.	Tuber- culosis, All Forms.	COUNTIES.	Tuber- culosis, All Forms.
Adams.....	102.5	Lawrence.....	196.4
Allen.....	149.2	Madison.....	142.5
Bartholomew.....	186.7	Marion.....	286.7
Benton.....	55.5	Marshall.....	101.8
Blackford.....	202.4	Martin.....	149.8
Boone.....	176.6	Miami.....	146.2
Brown.....	137.0	Monroe.....	181.2
Carroll.....	88.3	Montgomery.....	219.3
Cass.....	157.6	Morgan.....	188.4
Clark.....	155.7	Newton.....	93.3
Clay.....	112.2	Noble.....	100.6
Clinton.....	151.5	Ohio.....	302.4
Crawford.....	302.9	Orange.....	186.3
Daviess.....	188.3	Owen.....	181.3
Dearborn.....	134.0	Parke.....	143.0
Decatur.....	185.1	Perry.....	133.0
Dekalb.....	130.6	Pike.....	259.2
Delaware.....	147.1	Porter.....	39.0
Dubois.....	118.3	Posey.....	252.3
Elkhart.....	137.4	Pulaski.....	78.5
Fayette.....	101.8	Putnam.....	221.7
Floyd.....	136.5	Randolph.....	149.9
Fountain.....	202.0	Ripley.....	184.2
Franklin.....	154.8	Rush.....	191.2
Fulton.....	86.7	Scott.....	218.5
Gibson.....	157.3	Shelby.....	193.9
Grant.....	178.2	Spencer.....	108.1
Greene.....	168.9	Starke.....	89.9
Hamilton.....	136.3	Steuben.....	116.9
Hancock.....	205.7	St. Joseph.....	183.7
Harrison.....	107.8	Sullivan.....	135.6
Hendricks.....	171.9	Switzerland.....	295.3
Henry.....	164.4	Tippecanoe.....	141.5
Howard.....	168.4	Tipton.....	143.0
Huntington.....	136.3	Union.....	257.4
Jackson.....	237.7	Vanderburgh.....	176.1
Jasper.....	154.6	Vermillion.....	142.0
Jay.....	186.0	Vigo.....	149.8
Jefferson.....	280.7	Wabash.....	131.4
Jennings.....	214.2	Warren.....	145.8
Johnson.....	210.9	Warrick.....	137.8
Knox.....	134.2	Washington.....	126.6
Kosciusko.....	124.3	Wayne.....	259.9
Lagrange.....	84.8	Wells.....	136.5
Lake.....	120.8	White.....	69.8
Laporte.....	121.5	Whitley.....	104.0

MONTHLY ANALYSIS OF TUBERCULOSIS DEATHS.

January—The total number of deaths from tuberculosis was 349; of these 303 were of the pulmonary form. Of the total number 160 were males and 189 females. Of the males, 30 were fathers in the age period of 18-40 and left 67 orphans under 12 years of age. Of the females 68 were mothers in the age period of 18-40 and left 136 orphans under 12 years of age. We credit

consumption with the destruction of 98 fathers and mothers in the useful period of life and the production of 203 orphans. How many of these poor children will find their way into the orphan asylums can not be told. The homes invaded by the disease were 298. One hundred and eighty-eight of the total consumption deaths were in the age period of 15-40, which is 53 per cent.

February—The total number of deaths from tuberculosis was 406, and of these 369 were of the pulmonary form. Of the total number, 244 were females and 162 males. Of the males, 36 were fathers in the age period of 18-40 and left 73 orphans under 12 years of age. Of the females 82 were mothers in the age period of 18-40 and left 167 orphans under 12 years of age. Number of homes visited by the disease, 398. Total number of orphans produced, 240. Thirty-five deaths were under 15 years of age; 265 in the age period of 15-50, and the remainder were above 50.

March—The total number of deaths from tuberculosis was 431, and of these 373 were of the pulmonary form. Of the total number, 199 were males and 241 females. Of the males 33 were fathers in the age period of 18-40 and left 66 orphans under 12 years of age. Of the females 86 were mothers in the age period of 18-40 and left 176 orphans under 12 years of age. The number of homes visited by the disease was 392. The total number of orphans produced was 242. There were 297 consumption deaths in the age period of 15-50.

April—Total number of deaths from tuberculosis, all forms, were 424. Of these 363 were of the pulmonary form. Of the total number 195 were males and 229 females. Of the males 36 were fathers in the age period of 18-40 and left 75 orphans under 12 years of age. Of the females 77 were mothers in the same age period as above and left 167 orphans. The number of homes visited by the disease was 399. Total number of orphans produced 161. Two hundred and eighty-six deaths were in the age period of 15-50.

May—Total number of deaths from all forms, 363, 309 being pulmonary. Of the total number, 181 were males and 182 females. Of the males, 35 were fathers between the ages of 18-40 and left 72 orphans under 12 years of age. Of the females, 69 were mothers of the same age period as above and left 139 orphans under 12 years of age. Number of homes invaded, 351. Total number of orphans created, 201. Number of widows created, 35; number of widowers, 69.

June—The total number of deaths from tuberculosis, all forms, was 343, 294 being pulmonary. Of the total number, 153 were

males, and 190 females. Of the males, 22 were married and in the age period of 18-40 and left 47 orphans under 12 years of age. Of the females, 66 were married and in the same age period as above and they left 133 orphans under 12 years of age. Total orphans created by the disease under 12 years of age, 180. The number of homes invaded was 311.

July—Total number of deaths, 354. Fifty-six of these were other forms than pulmonary. Of the total number, 161 were males and 193 females. Of the males, 22 were married and were in the age period of 18 to 40, and they left 44 orphans under 12 years of age. Of the females, 68 were married and in the age period just named and they left 136 orphans under 12 years of age. The total number of orphans made by this disease in one month was 180. The total number of homes invaded, 354.

August—Total number of deaths 377, 305 pulmonary, 72 other forms. Of the total number, 176 were males and 201 females. Of the males, 38 were married and in the age period of 18-40, the prime of life, and they left 76 orphans under 12 years of age. Of the females, 86 were married in the same age period as above and left 172 orphans under 12 years of age. The total number of orphans was 248, and the homes invaded numbered 361. Four deaths occurred in the age period of 80-90.

September—Total number of deaths 325, 270 pulmonary, 55 other forms. Of the total number, 143 were males and 182 females. Of the males, 21 were married in the age period of 18-40 and left 42 orphans under 12 years of age. Of the females, 65 were married in the same age period as above and left 130 orphans under 12 years of age. Total number of orphans made by the disease this month, 172. Homes invaded, 309. Two deaths, male and female, occurred, 80-90 years of age. Nineteen, eight of whom were women, occurred in the age period of 70-80.

October—Total number of deaths 304, of which 256 were of the pulmonary form and 48 other forms. Of the total number, 144 were males and 160 females. Of the males, 18 were married in the age period of 18-40 and left 39 orphans under 12 years of age. Of the females 51 were married in the same age period as above and left 102 orphans under 12. The total number of orphans made by the disease this month was 141. Homes invaded, 287. Eighteen tuberculosis deaths occurred of people over 70 years of age.

November—The total number of deaths was 292, of which 254 were of the pulmonary form and 38 other forms. Of the total number, 134 were males and 168 females. Of the males, 53 were

married and in the age period of 18-40 and left 106 orphans under 12 years of age. Of the females, 21 were married in the same age period as above and left 146 orphans under 12 years of age. The total number of orphans made by the disease this month was 152; homes invaded, 271. As usual, the greatest destruction was in the useful period of life, 15-50, wherein 188, or 64 per cent. of the total, deaths occurred.

December—Total number of deaths 315, of which 268 were of the pulmonary form. The male deaths were 156, females 159. Of the males 30 were married, in the age period of 18-40, and left 60 orphans under 12 years of age. Of the females, 55 were married in the same age period as above and left 117 orphans under 12 years of age. Total number of orphans made by the disease this month 177. Homes invaded, 296. Of the 315 consumption deaths, 105, or 33.3 per cent., were in the age period of 15-50.

PNEUMONIA.

A slight decrease appears for pneumonia, inasmuch as the number of deaths for 1907 was 3,410, and the annual average for the last eight years is 3,445. In large cities pneumonia leads as a cause of death, but it is second to consumption in Indiana. The tables by months and by age periods, with their accompanying graphic charts, show the pneumonia status in this state.

PNEUMONIA.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	373	655	473	450	579	601	490	445	508
February.....	435	673	535	424	750	781	439	646	585
March.....	616	646	497	419	761	656	541	532	583
April.....	498	466	371	330	576	260	404	290	400
May.....	234	280	207	240	326	189	232	276	248
June.....	94	120	104	129	115	90	119	144	114
July.....	62	72	70	83	101	82	88	62	77
August.....	65	74	97	86	69	69	82	68	76
September.....	56	90	113	114	86	88	98	75	90
October.....	89	156	169	134	135	148	189	145	145
November.....	136	202	196	246	251	253	300	218	225
December.....	223	389	307	389	353	372	410	301	383
Totals.....	2,883	3,823	3,319	3,044	4,102	3,594	3,392	3,202	3,434

PNEUMONIA.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	542	758	692	703	919	898	714	639	733
1-2 years.....	206	248	246	216	326	251	262	209	245
2-3 years.....	113	123	113	107	145	97	127	96	115
3-4 years.....	53	73	47	57	87	63	67	57	63
4-5 years.....	40	46	39	34	53	28	46	29	39
5-10 years.....	82	120	93	102	145	90	91	65	98
10-15 years.....	64	66	55	57	72	71	50	40	59
15-20 years.....	85	139	93	88	128	89	95	63	97
20-25 years.....	95	130	107	83	108	83	77	84	96
25-30 years.....	92	119	86	72	98	79	89	90	91
30-35 years.....	91	115	96	58	104	90	86	87	91
35-40 years.....	104	121	80	78	114	107	104	98	100
40-45 years.....	89	142	104	77	105	98	106	88	101
45-50 years.....	107	110	87	103	137	106	112	100	107
50-55 years.....	116	159	118	89	137	130	130	143	127
55-60 years.....	107	179	112	132	136	140	137	125	133
60-65 years.....	181	218	142	164	195	173	155	172	175
65-70 years.....	162	244	205	172	225	237	216	215	209
70-75 years.....	163	246	192	202	261	270	229	243	225
75-80 years.....	162	191	200	192	268	226	232	238	213
80-90 years.....	195	216	181	204	271	237	232	280	227
90 years and over.....	.....	25	24	27	42	28	25	33	25

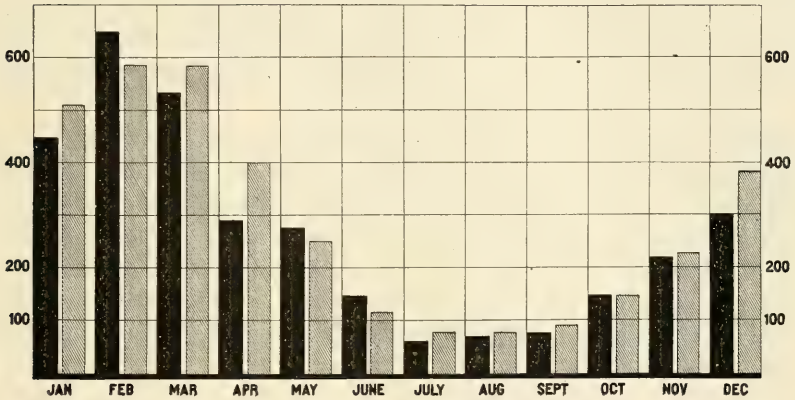
PNEUMONIA DEATHS

BY MONTHS

■ - 1907

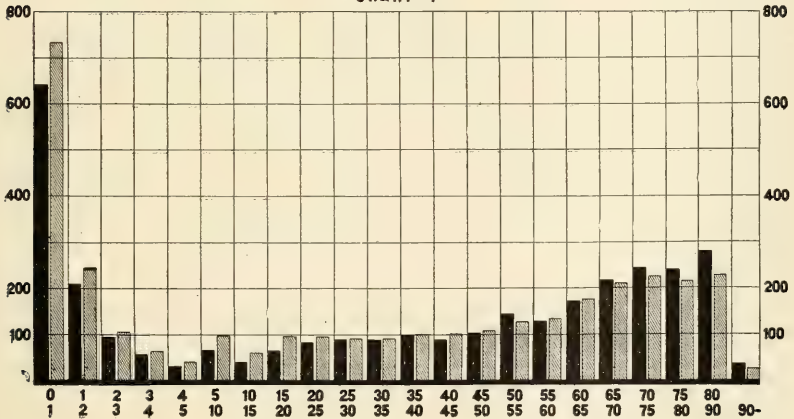
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 6



BY AGES

CHART 7



MONTHLY ANALYSIS OF PNEUMONIA DEATHS.

January—Pneumonia caused 427 deaths. In the corresponding month last year, 415 deaths. Of the total number of deaths for 1907, 221 were males and 206 females. One hundred and eighty-seven of the deaths were under 20 years of age, 79 between 20 and 50, 167 over 50, and 2 were 90 and over.

February—Pneumonia caused 664 deaths. In the corresponding month last year, 403 deaths. In the preceding month, 427 deaths. There were 237 more deaths in February than occurred in January. Of the total pneumonia deaths, 325 were males and 339 females. It is quite unusual for females to lead in this disease. Of the total number, 204 were under 15 years of age, 128 between 15-50, and the remainder were over 50.

March—Pneumonia caused 575 deaths. This is a decrease over the preceding month of 89 deaths. In the corresponding month last year, 469 deaths. By this comparison, which is the right one, there is no improvement to be noted, as there is an increase of 107 deaths. Eighty of the deaths from pneumonia were under one year of age, 74 in the age period of 1-5, 65 between 5 and 30, 125 between 30 and 60, 72 in the age period of 60-70, 96 from 70-80, 57 from 80-90, and 6 over 90.

April—Pneumonia caused 284 deaths. In the corresponding month last year, 386 deaths, a decrease of 102. Forty-one pneumonia deaths were under 1 year of age, 53 between 15 and 50, and 119 over 50. Two over 90 years of age died from the malady.

* May—Pneumonia caused 331 deaths. In the corresponding month last year, 213. By this comparison there is an increase of 118 deaths. Of the pneumonia deaths 59 were under 1 year of age, 65, 1-5; 5-20, 19; 20-50, 58; 50-70, 57; over 70, 73; over 90, 3.

June—Pneumonia caused 151 deaths. In the corresponding month last year, 111 deaths. Sixty-two pneumonia deaths were under 5 years of age; 6 were from 5-20; 20-50, 31; 50-80, 43; 80 and over, 14.

July—Pneumonia caused 84 deaths. In the preceding month, 151. In the corresponding month last year, 85. Of the pneumonia deaths, 34 were under 20 years; 15 in the age period of 20-50; 30 in the age period of 50-80; 80 and over, 5.

August—Total number of deaths, 66. In the corresponding month last year, 79. Of the pneumonia deaths, 14 were under one year of age; 11 were 1-10; 10-20, 7; 20-50, 6; 50-80, 24; 80 and over, 7. Of the total number of deaths from pneumonia, 31 were males and 35 females.

September—Total number of deaths, 93. In the corresponding month last year, 93. Of the pneumonia deaths, 13 were under one year of age; 1-5, 13; 5-20, 5; 20-40, 15; 40-60, 13; 60-80, 27. Of the total deaths, 52 were males and 41 females.

October—The total number of deaths from pneumonia was 160. In the corresponding month last year, 176. Of the pneumonia deaths, 99 were males and 71 females. There were 29 deaths under one year of age, 25 in the age period of 1-5.

November—There were 245 deaths reported. In the corresponding month last year, 302. In the preceding month, 160. Of the total number, 132 were males and 113 females. By age periods the pneumonia deaths were: Under 1, 45; 1-5, 23; 5-20, 16; 20-40, 29; 40-60, 36; 60-80, 71; 80 and over, 25.

December—There were 334 deaths reported. In the corresponding month last year, 408. In the preceding month, 245. Of the total number, 171 were males and 163 females. Fifty-four were in the age period of 1-20; 47 in the age period of 20-50; 162 were 50 and over. Two pneumonia deaths occurred in persons over 90 years of age.

TYPHOID FEVER.

The typhoid fever deaths in 1907 numbered 933, which is a slight decrease as compared with the annual average, 1,079, for the last eight years. As shown in the tables herewith, and by the graphic charts drawn therefrom, typhoid has gradually fallen since 1900. The last five months of the year show more deaths from typhoid than the seven preceding months.

TYPHOID FEVER.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	109	74	66	61	36	511	39	72	63
February.....	52	50	37	53	55	35	29	57	46
March.....	40	49	41	55	62	34	40	48	46
April.....	39	41	45	45	61	26	32	38	41
May.....	44	35	31	39	55	33	39	42	39
June.....	27	27	28	42	58	48	29	30	36
July.....	65	81	88	64	70	57	52	58	67
August.....	144	148	176	120	107	121	96	145	132
September.....	245	198	237	193	138	203	155	141	188
October.....	323	222	225	165	167	154	168	143	196
November.....	208	185	155	104	137	101	148	84	140
December.....	144	88	88	72	67	65	86	75	85
Totals.....	1,440	1,198	1,217	1,013	1,013	928	913	933	1,079

TYPHOID FEVER.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	13	15	9	4	16	11	12	8	11
1-2 years.....	14	14	15	13	11	14	11	7	12
2-3 years.....	18	12	29	12	18	16	13	13	16
3-4 years.....	26	18	19	17	8	11	19	13	16
4-5 years.....	22	19	20	16	16	18	18	10	17
5-10 years.....	105	91	77	77	74	72	65	58	77
10-15 years.....	136	87	98	102	82	74	85	92	94
15-20 years.....	229	178	167	160	133	125	138	145	159
20-25 years.....	193	177	169	136	137	136	120	126	149
25-30 years.....	120	146	139	102	89	94	94	94	109
30-35 years.....	106	78	117	62	73	64	76	79	82
35-40 years.....	98	70	69	62	73	45	62	67	68
40-45 years.....	71	75	73	49	47	49	34	46	55
45-50 years.....	52	49	58	45	49	46	37	41	47
50-55 years.....	34	34	37	33	45	32	36	32	35
55-60 years.....	50	36	31	35	37	31	22	24	33
60-65 years.....	28	33	22	18	42	30	18	28	27
65-70 years.....	28	25	25	21	22	20	16	16	21
70-75 years.....	25	24	21	19	18	19	10	17	19
75-80 years.....	16	5	13	12	10	9	15	10	11
80-90 years.....	9	8	4	11	7	8	8	5	7
90 years and over.....				1					

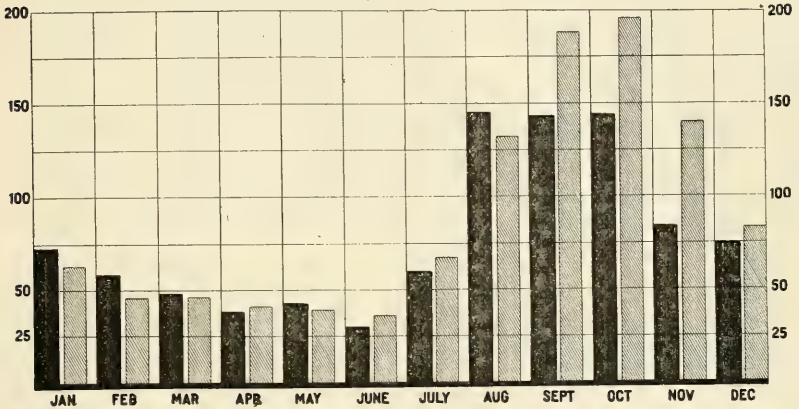
TYPHOID FEVER DEATHS

BY MONTHS

■ - 1907

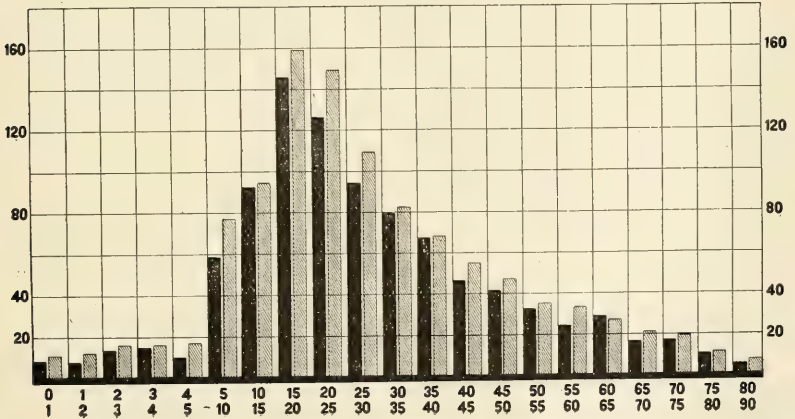
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 8



BY AGES

CHART 9



MONTHLY ANALYSIS OF TYPHOID FEVER DEATHS.

January—Typhoid fever, 688 cases were reported from 50 counties, with 65 deaths. In the corresponding month last year, 350 cases from 52 counties, with 33 deaths. The disease was epidemic in the following counties: Boone, Clark, Daviess, Dearborn, Dekalb, Hamilton, Marion, Miami, Putnam, St. Joseph, Switzerland, Vanderburgh.

February—There were 312 cases of typhoid fever reported from 45 counties, with 46 deaths. The corresponding month last year, 117 cases from 38 counties, with 29 deaths. Here is a decided increase. In the preceding month, 688 cases, with 65 deaths in 50 counties. The disease was epidemic in Clinton and Dekalb counties.

March—Three hundred and four cases of typhoid fever were reported from 33 counties, with 35 deaths. Number of deaths in corresponding month last year, 15. The disease was epidemic in the following counties: Boone, Clark, Dekalb, Lagrange and Laporte.

April—Two hundred and eighty cases of typhoid were reported from 37 counties, with 38 deaths. In the corresponding month last year, 211 cases from 62 counties, with 34 deaths. The disease prevailed unusually, but was not epidemic in the following counties: Clark, 7 cases; Dearborn, 8; Laporte, 11; Marion, 12; Vanderburgh, 16; Vigo, 10; Washington, 15.

May—Two hundred and four cases of typhoid reported from 31 counties, with 32 deaths. In the corresponding month last year, 194 cases in 32 counties, and 40 deaths. The following counties reported five cases and over: Bartholomew, 10 cases, no deaths; Clark, 11 cases, 2 deaths; Daviess, 7 cases, no deaths; Floyd, 13 cases, 1 death; Lake, 6 cases, 3 deaths; Marion, 10 cases, 3 deaths; Vigo, 11 cases, 4 deaths.

June—Two hundred and ninety-eight cases of typhoid fever reported in 37 counties, with 25 deaths. In the corresponding month last year 301 cases, 39 counties, with 29 deaths. The disease prevailed unusually in the following counties: Clark, 8 cases; Grant, 8; Lake, 12; Vigo, 16, and Warrick, 9.

July—There were 312 cases in 64 counties, with 53 deaths from typhoid fever. In the corresponding month last year there were 180 cases in 55 counties, with 62 deaths. The disease was epidemic in the following counties: Clark, 10; Dearborn, 10; Delaware, 15; Johnson, 10; Lake, 15; Marion, 16; Scott, 12; Vanderburgh, 21; Vermillion, 10; Vigo, 11; Warrick, 10.

August—Seven hundred and twenty-eight cases of typhoid fever were reported in 79 counties, with 131 deaths. In the corresponding month last year, 446 cases in 68 counties, with 98 deaths. This considerable increase can not be considered encouraging, after the people have been taught by circulars, by numerous newspaper articles, by Board of Health lectures, and by warnings of doctors as to where typhoid comes from and its prevention. The disease exists in epidemic form in the following counties: Allen, Daviess, Decatur, Delaware, Floyd, Jackson, Johnson, Lake, Knox, Madison, Marion, Scott, Sullivan and Vanderburgh.

September—Six hundred and forty-two cases of typhoid fever reported in 76 counties, with 133 deaths. In the corresponding month last year 977 cases in 76 counties, with 143 deaths. This comparison shows a slight decrease. The disease existed in epidemic form in the following counties: Allen, Blackford, Daviess, Dearborn, Decatur, Dekalb, Delaware, Fayette, Franklin, Grant, Hancock, Jackson, Jennings, Knox, Marion, Noble, Parke, Randolph, Sullivan, Vanderburgh, Warrick and White.

October—Five hundred and sixty-two cases of typhoid fever reported in 73 counties. We feel confident the disease existed in every one of the 92 counties. Number of deaths, 144. In the corresponding month last year, 732 cases in 73 counties, with 150 deaths. In the preceding month, 642 cases in 76 counties, with 133 deaths. The disease existed in epidemic form in the following counties: Clark, 12 cases; Daviess, 18; Clinton, 10; Dearborn, 12; Fayette, 20; Knox, 16; Lawrence, 10; Morgan, 14, and Warrick, 13.

November—Four hundred and forty cases of typhoid fever reported from 60 counties, with 76 deaths. In the corresponding month last year, 790 cases reported in 73 counties, with 135 deaths. Adams county reports 12 cases, 2 deaths. This amounts to an epidemic for a population of a little over 23,000. Clark reports 9 cases, with 2 deaths, which is also an epidemic in a population of 32,000. Knox reports 20 cases, with 2 deaths, an epidemic in a population of 35,000.

December—Three hundred and eighteen cases of typhoid fever in 47 counties, with 69 deaths. In the corresponding month last year, 674 cases in 50 counties, with 79 deaths. The disease seemed not to be epidemic, except perhaps in Parke county, from whence 11 cases were reported.

DIPHTHERIA.

Diphtheria caused 353 deaths in 1907, or 95 less than the average (448) for the last eight years. January was the most fatal month and June the least fatal.

The tables giving the number of deaths by months and by ages, follow herewith:

DIPHTHERIA.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	90	110	49	61	51	32	33	43	58
February.....	70	61	35	49	35	31	23	41	43
March.....	68	39	32	27	29	27	26	35	35
April.....	30	29	27	22	32	13	16	27	24
May.....	14	23	30	12	22	13	8	20	17
June.....	13	23	16	16	18	8	12	10	14
July.....	15	15	7	15	10	16	11	15	13
August.....	40	24	21	23	12	15	13	20	21
September.....	64	38	39	35	11	34	36	35	36
October.....	111	74	48	69	21	82	77	36	64
November.....	125	56	63	77	35	41	82	37	64
December.....	105	62	57	56	38	54	65	34	59
Totals.....	745	554	424	462	314	366	402	353	448

DIPHTHERIA.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	52	60	51	50	28	23	26	20	38
1-2 years.....	73	58	36	59	47	35	45	34	48
2-3 years.....	106	65	61	56	33	48	51	35	57
3-4 years.....	94	80	39	64	46	53	47	51	59
4-5 years.....	76	53	45	46	22	41	58	30	46
5-10 years.....	230	143	122	141	99	114	124	127	137
10-15 years.....	70	51	46	28	26	28	35	32	39
15-20 years.....	24	23	14	9	5	10	10	7	12
20-25 years.....	4	7	1	3	1	7	1	8	4
25-30 years.....	1	3	1	.....	1	3	.....	3	1
30-35 years.....	2	1	1	2	1	1	.....	1	1
35-40 years.....	1	3	.....	.....	1	1	1	2	1
40-45 years.....	.....	1	1	.....	.....	.....	2	2	1
45-50 years.....	.....	1	.....	.....	.....	.....	.....	1	.....
50-55 years.....	.....	2	.....	.....	1	.....	1	.....	.....
55-60 years.....	2	.....	.....	1	.....	2	.....	1	.....
60-65 years.....	.....	.....	1	.....	.....	.....	.....	.....	.....
65-70 years.....	2	1	.....	1	.....	.....	.....	.....	.....
75-80 years.....	.....	.....	.....	1	.....	.....	.....	.....	.....

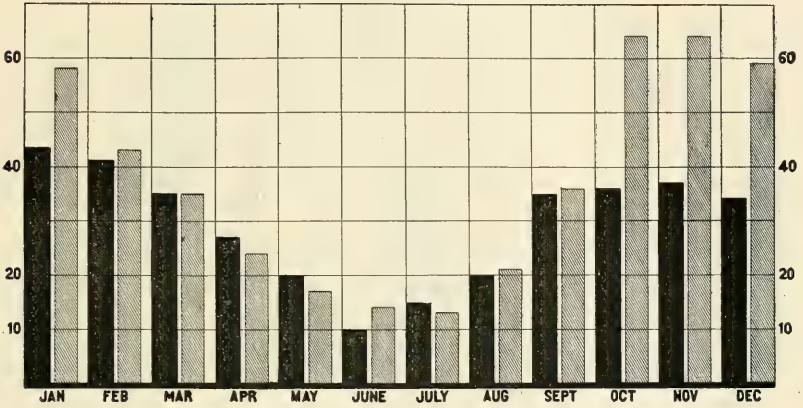
DIPHTHERIA DEATHS

BY MONTHS

■ - 1907

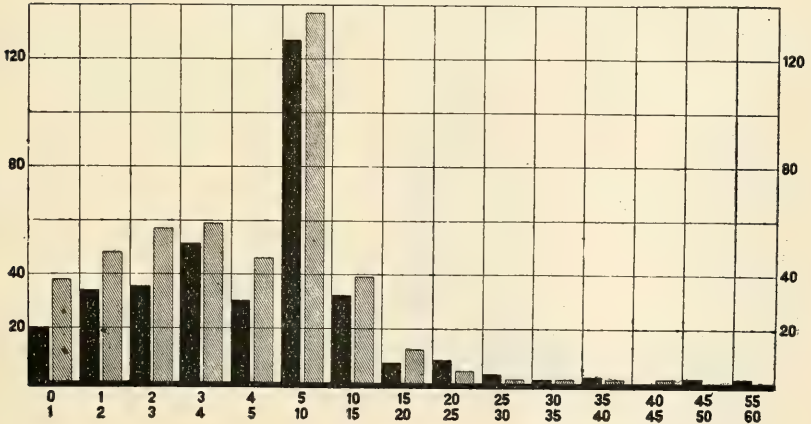
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 10



BY AGES

CHART 11



SCARLET FEVER.

Scarlet fever caused 91 deaths in 1907, or 45 less than the average annual number of deaths for the last eight years.

The tables given herewith and the graphic charts drawn from them, show the scarlet fever situation in Indiana :

SCARLET FEVER.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	17	24	22	22	24	18	11	6	18
February.....	15	18	19	13	24	11	9	9	14
March.....	17	27	18	10	33	20	12	18	19
April.....	16	18	11	9	22	21	7	9	14
May.....	12	9	5	4	15	11	7	5	8
June.....	9	12	3	6	9	4	10	3	7
July.....	2	5	6	13	4	14	7	10	7
August.....	1	5	6	8	6	6	3	5	5
September.....	5	4	8	13	7	5	6	3	6
October.....	14	3	19	16	12	5	8	7	10
November.....	13	10	24	18	17	11	14	8	14
December.....	20	14	9	34	19	7	7	8	14
Totals.....	141	149	150	166	192	133	101	91	136

SCARLET FEVER.

Death by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	7	7	11	13	13	10	5	4	8
1-2 years.....	17	14	13	9	27	18	13	7	14
2-3 years.....	22	29	17	17	33	20	10	15	20
3-4 years.....	20	18	24	22	25	17	15	13	19
4-5 years.....	18	22	14	19	18	14	10	7	15
5-10 years.....	42	37	43	55	61	38	27	31	41
10-15 years.....	7	8	14	19	11	11	8	8	10
15-20 years.....	4	4	3	3	2	1	2	5	3
20-25 years.....	1	2	3	3	1	1	10		2
25-30 years.....		3	1			2		1	1
30-35 years.....		1	1	1			1		
40-45 years.....		1		1					
45-50 years.....		1			1	1			
80-90 years.....				1					

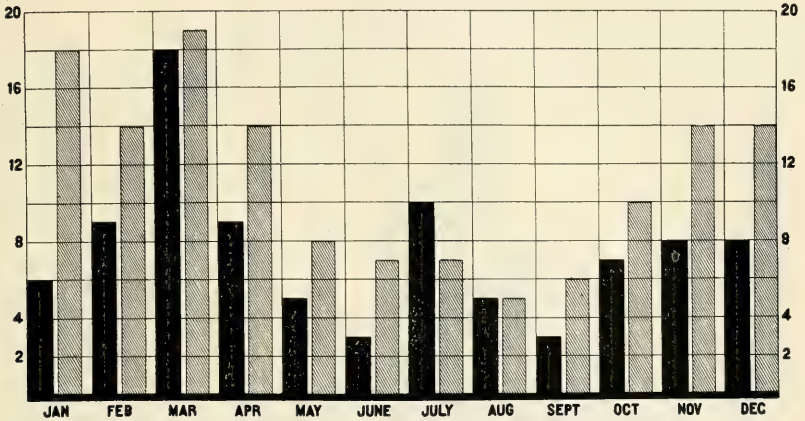
SCARLET FEVER DEATHS

BY MONTHS

■ - 1907

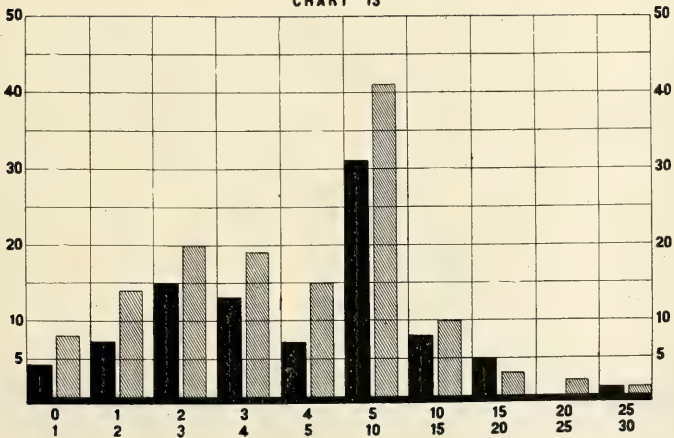
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 12



BY AGES

CHART 13



DIARRHOEAL DISEASES.

The cases of diarrhoeal disease under two years of age numbered 1,639 for 1907.

The tables and charts show the status of the disease under the conditions and for the periods and ages stated:

DIARRHOEAL DISEASES—UNDER FIVE YEARS OF AGE.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907. Under 2 years.	Average.
January.....	19	14	15	11	29	26	28	34	22
February.....	11	12	14	22	30	30	25	32	22
March.....	21	17	14	20	33	36	29	35	25
April.....	13	26	21	17	24	22	39	18	22
May.....	32	19	29	25	29	35	42	35	20
June.....	111	81	116	83	54	116	71	81	89
July.....	480	468	455	323	307	359	321	596	388
August.....	627	500	569	475	498	469	484	503	515
September.....	436	293	337	275	344	343	447	280	357
October.....	198	167	150	140	204	186	232	160	177
November.....	80	64	56	36	49	54	66	40	55
December.....	21	15	23	22	28	24	39	25	24
Totals.....	2,049	1,776	1,779	1,449	1,629	1,700	1,823	1,639	1,726

DIARRHOEAL DISEASES—FIVE YEARS OF AGE AND OVER.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907. Under 2 years.	Average.
January.....	27	30	25	24	30	32	26	40	29
February.....	22	22	23	20	38	29	36	33	28
March.....	32	24	28	27	37	42	35	41	33
April.....	21	17	28	23	28	27	41	38	28
May.....	26	28	30	40	33	28	30	29	30
June.....	15	31	25	36	30	44	29	63	34
July.....	139	130	129	93	73	87	78	150	109
August.....	137	169	170	131	110	152	119	203	149
September.....	118	123	86	116	104	94	130	122	111
October.....	69	72	59	64	63	67	92	62	68
November.....	36	39	39	26	32	28	39	42	35
December.....	26	42	27	22	33	28	40	24	30
Totals.....	668	727	669	622	611	658	695	847	684

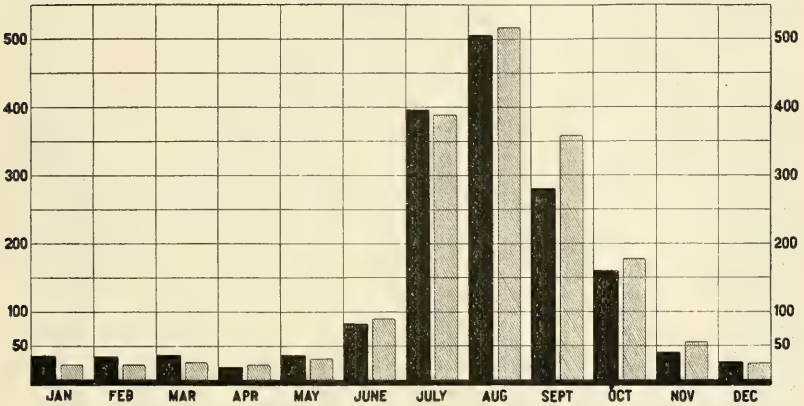
DIARRHOEAL DISEASES

BY MONTHS

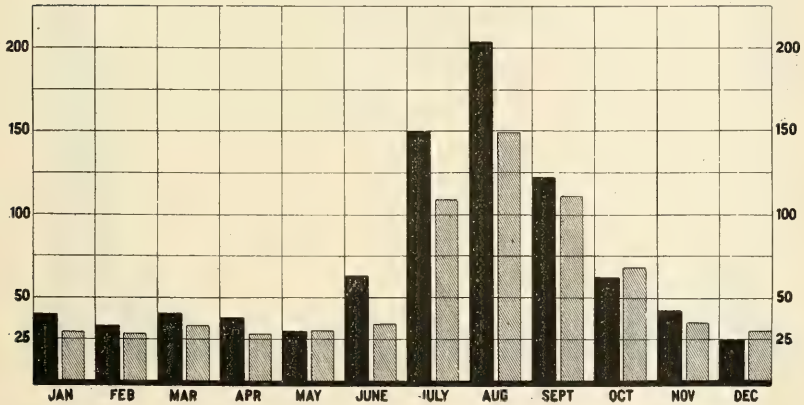
■ - 1907

▨ - AVERAGE FOR LAST EIGHT YEARS

UNDER TWO YEARS OF AGE
CHART 14



TWO YEARS AND OVER
CHART 15



DIARRHOEAL DISEASES.

Deaths by Ages, with Average for Last Eight Years.

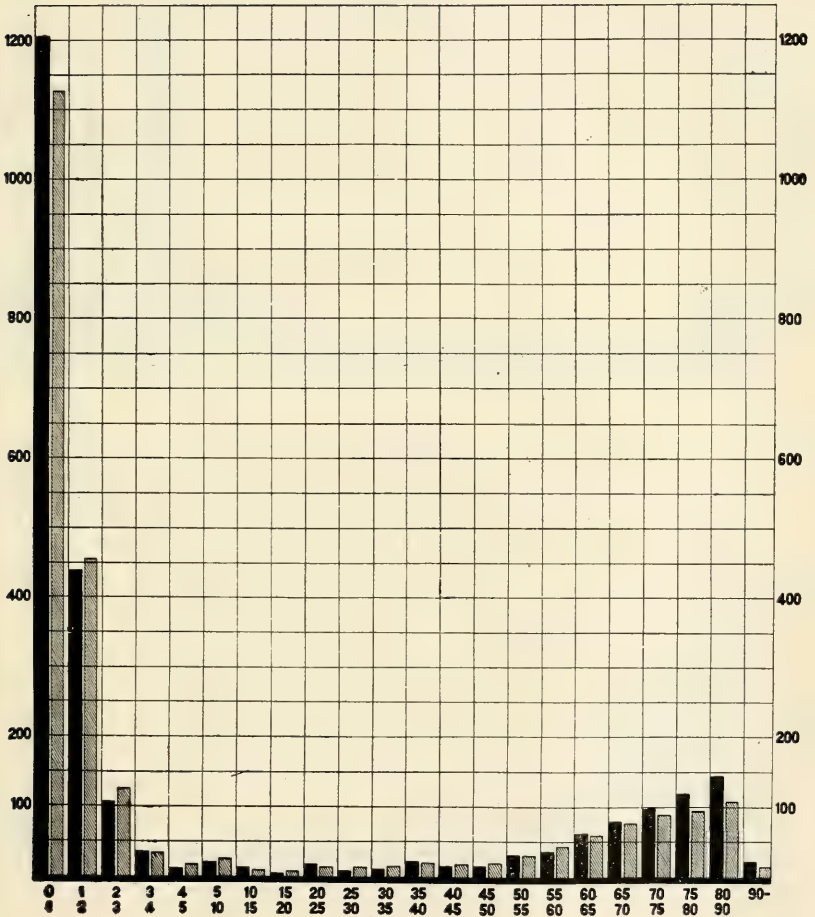
AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	1,205	1,118	1,070	894	1,068	1,115	1,240	1,202	1,126
1-2 years.....	534	513	533	421	584	406	417	437	455
2-3 years.....	152	139	140	110	112	120	116	105	125
3-4 years.....	44	28	34	19	40	36	31	33	33
4-5 years.....	34	17	13	11	21	13	20	11	17
5-10 years.....	25	36	23	12	31	29	17	19	24
10-15 years.....	1	9	8	11	13	10	6	12	8
15-20 years.....	8	13	7	6	4	8	8	4	7
20-25 years.....	11	15	14	9	15	17	12	16	13
25-30 years.....	9	13	15	12	13	16	21	7	13
30-35 years.....	9	32	12	20	14	10	10	10	14
35-40 years.....	19	18	28	14	15	22	17	20	19
40-45 years.....	22	13	14	15	19	20	19	13	17
45-50 years.....	21	22	20	24	19	13	14	13	18
50-55 years.....	31	31	30	36	33	25	20	30	30
55-60 years.....	43	46	57	37	37	51	37	35	43
60-65 years.....	63	62	60	45	57	72	59	61	59
65-70 years.....	77	91	73	67	68	68	90	78	76
70-75 years.....	82	70	80	98	88	93	99	97	88
75-80 years.....	69	83	98	91	88	95	107	117	93
80-90 years.....	94	107	102	94	89	104	124	141	107
90 years and over.....		22	11	14	12	13	18	20	13

DIARRHOEAL DISEASES BY AGES

■ - 1907

▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 16



INFLUENZA.

Influenza caused 666 deaths in 1907, which is a large increase as compared with the average (498) for the last eight years. The disease existed, but not in epidemic form, in every county of the state, and deaths occurred in every county in the state except Starke, Whitley and Warren. The tables and charts herewith show the status of the disease:

INFLUENZA.

Deaths by Months with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average
January.....	53	269	60	31	45	114	53	71	85
February.....	70	349	84	51	90	221	44	159	133
March.....	98	180	51	87	146	151	48	234	124
April.....	101	128	37	60	70	37	30	51	64
May.....	34	42	15	37	20	15	7	52	27
June.....	19	12	4	10	7	7	2	14	9
July.....	12	9	8	7	2	5	4	7	6
August.....	4	10	3	9	5	.....	2	4	4
September.....	1	3	7	3	1	4	3	4	3
October.....	13	5	8	7	4	4	8	2	6
November.....	8	12	8	10	18	12	11	17	12
December.....	11	30	17	36	26	21	12	51	25
Totals.....	424	1,049	202	348	434	591	224	666	418

INFLUENZA.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	35	66	47	13	32	43	14	26	34
1-2 years.....	7	14	7	3	4	10	3	12	7
2-3 years.....	3	11	4	3	1	6	5	5	4
3-4 years.....	1	5	4	2	4	.....	.....	3	2
4-5 years.....	2	4	4	2	.....	1	2	.....	1
5-10 years.....	7	11	9	2	3	5	2	4	4
10-15 years.....	2	6	4	6	7	4	3	6	4
15-20 years.....	3	12	3	3	6	7	4	11	6
20-25 years.....	5	20	4	4	3	16	3	11	8
25-30 years.....	13	22	2	5	8	3	.....	5	7
30-35 years.....	7	22	2	5	7	9	2	18	9
35-40 years.....	9	27	6	5	7	9	4	14	10
40-45 years.....	17	33	1	6	6	16	3	9	11
45-50 years.....	17	33	6	7	13	14	10	23	15
50-55 years.....	8	43	12	16	9	17	13	26	18
55-60 years.....	15	41	14	16	19	32	6	78	22
60-65 years.....	23	57	5	28	22	40	11	24	26
65-70 years.....	47	103	35	27	37	47	24	73	49
70-75 years.....	59	159	35	53	73	67	31	94	71
75-80 years.....	55	151	39	58	61	86	31	89	71
80-90 years.....	83	180	51	74	94	132	43	151	101
90 years and over.....	.....	26	7	9	15	23	8	23	14

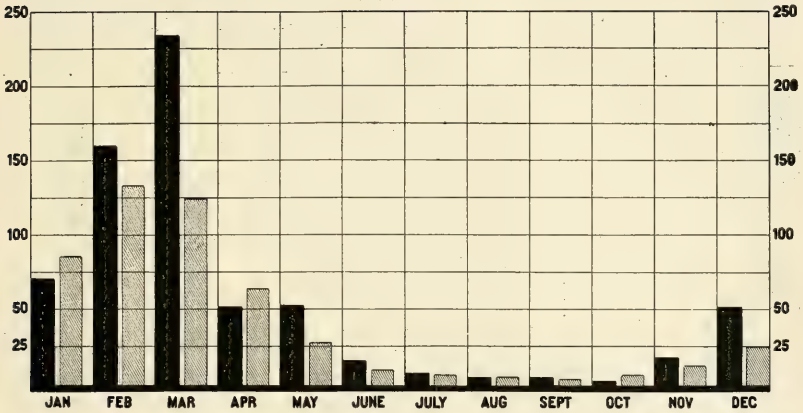
INFLUENZA DEATHS

BY MONTHS

■ - 1907

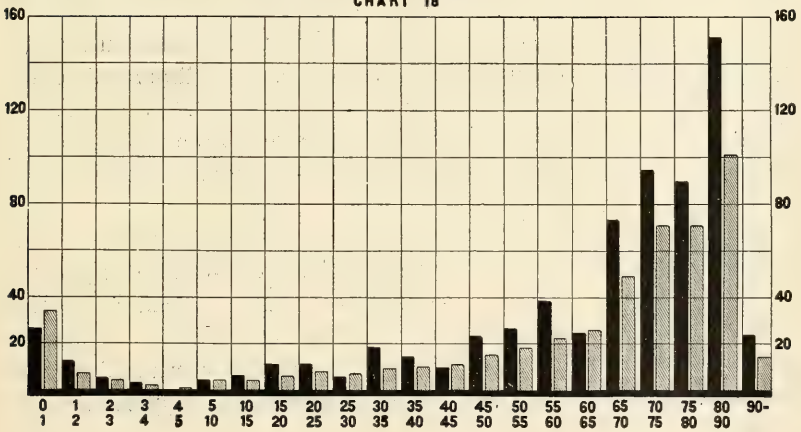
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 17



BY AGES

CHART 18



SMALLPOX.

This disease prevailed throughout the year, but usually in very mild form. The deaths numbered 8, and the deaths numbered 8 in the preceding year, 1906. The smallpox deaths occurred, 1 in Howard county, 2 in Miami county, 1 in Pulaski county, 2 in St. Joseph county, 2 in Marion county.

SMALLPOX.

Table Giving Number of Deaths by Months for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Total.	Average for Eight Years.
January.....	1	2	4	51	8	7	.....	3	76	9
February.....	4	2	2	55	5	11	.....	2	81	10
March.....	2	4	3	31	3	3	.....	.....	46	5
April.....	3	1	8	21	6	3	1	1	44	5
May.....	2	3	1	10	7	3	.....	1	27	3
June.....	2	3	2	3	3	4	.....	1	18	2
July.....	3	1	15	4	6	3	1	.....	33	4
August.....	.....	.....	1	14	3	.....	.....	.....	18	2
September.....	2	1	7	2	17	.....	2	.....	31	4
October.....	.....	2	10	.....	18	.....	3	.....	33	4
November.....	.....	1	4	1	13	.....	.....	.....	19	2
December.....	.....	1	18	2	8	1	1	.....	32	4
Totals.....	19	21	75	195	97	35	8	8	458	54

MONTHLY ANALYSIS OF SMALLPOX.

January—There were 232 cases of smallpox reported from 15 counties, with 3 deaths. In the corresponding month last year, 80 cases in 10 counties, and no deaths. The following counties reported the disease as present: Clark, 1 case; Elkhart, 2 cases; Grant, 17; Hendricks, 1; Howard, 1; Jefferson, 40; Jennings, 2; Marion, 35 and 2 deaths; Marshall, 6 cases; Miami, 81 cases, 1 death; Monroe, 2 cases; Pulaski, 2; St. Joseph, 21; Vigo, 1; Wells, 1.

February—Two hundred and forty-one cases of smallpox, with 1 death, reported from 25 counties. The following counties reported the disease present: Cass, 1 case; Clark, 1; Dekalb, 5; Elkhart, 8; Floyd, 2; Jefferson, 40; Jennings, 10; Knox, 1; Lake, 1; Marion, 4; Marshall, 9; Miami, 64, with 1 death; Morgan, 20 cases; Noble, 1; Pulaski, 1; Scott, 1; St. Joseph, 23; Tippecanoe, 11; Wabash, 3; Wells, 2.

March—Two hundred and twenty-one cases of smallpox, with no deaths, reported from 20 counties. The following counties reported the disease present: Allen, 3 cases; Cass, 3; Dekalb, 7; Delaware, 7; Elkhart, 5; Floyd, 2; Fulton, 3; Grant, 13; Hendricks, 55; How-

ard, 9; Jefferson, 13; Marion, 18; Miami, 49; Noble, 14; Pulaski, 5; Scott, 3; Shelby, 3; St. Joseph, 3; Tipton, 5; Vermillion, 1.

April—Ninety-one cases reported from 20 counties, with 1 death. The following counties reported the disease present: Cass, 2 cases; Clark, 1; Dearborn, 1; Dekalb, 9; Elkhart, 6; Floyd, 7; Grant, 9; Hendricks, 10; Howard, 4, with 1 death; Jackson, 15 cases; Jefferson, 4; Laporte, 1; Marion, 17; Marshall, 10; Miami, 10; Noble, 1; Shelby, 2; St. Joseph, 4; Wabash, 2; White, 1.

May—One hundred and forty-nine cases, with 1 death, reported from 23 counties. In the same month last year, 112 cases, no deaths, from 14 counties. The following counties reported smallpox: Allen, 3 cases; Cass, 2; Clinton, 1; Elkhart, 22; Floyd, 1; Fountain, 1; Grant, 5; Hamilton, 15; Harrison, 3; Hendricks, 8; Howard, 3; Laporte, 11; Lawrence, 1; Marion, 18; Marshall, 21; Miami, 6; Porter, 2; St. Joseph, 6 and 1 death; Tippecanoe, 6; Tipton, 14; Wabash, 8; White, 3; Whitley, 2.

June—One hundred and nineteen cases in 31 counties, with one death, from smallpox. In the corresponding month last year, 63 cases in 8 counties, with no deaths. The following counties reported the disease present: Allen, 2 cases; Boone, 2; Carroll, 9; Cass, 4; Clinton, 1; Delaware, 1; Elkhart, 13; Grant, 4; Hamilton, 10; Hendricks, 3; Howard, 1; Huntington, 2; Kosciusko, 1; Lake, 5; Laporte, 16; Lawrence, 7; Madison, 1; Marion, 7; Marshall, 30; Miami, 16; Montgomery, 7; Parke, 1; Pike, 3; St. Joseph, 18, and 1 death; Tippecanoe, 1 case; Tipton, 14; Vanderburgh, 1; Vermillion, 3; Wabash, 8; Wells, 1; Whitley, 1.

July—Seventy-four cases of smallpox in 21 counties, with no deaths. In the corresponding month last year there were 31 cases in 6 counties, with 3 deaths. The following counties reported the disease present: Allen, 1 case; Boone, 2; Cass, 3; Clinton, 2; Delaware, 2; Elkhart, 4; Grant, 4; Hamilton, 17; Hendricks, 2; Howard, 1; Jay, 3; Jefferson, 1; Kosciusko, 12; Laporte, 3; Marion, 3; Marshall, 2; Miami, 1; Montgomery, 1; Noble, 1; Tippecanoe, 3; Tipton, 6.

August—Sixty-three cases of smallpox in 18 counties, with no deaths. In the corresponding month last year, 40 cases in 3 counties, with no deaths. The following counties reported the disease present: Allen, 1 case; Boone, 3; Carroll, 10; Cass, 2; Dearborn, 2; Delaware, 1; Elkhart, 3; Grant, 3; Howard, 2; Knox, 1; Madison, 10; Marion, 3; Marshall, 6; Miami, 6; Montgomery, 1; Tippecanoe, 6; Tipton, 2; Wabash, 1.

September—Twenty-three cases of smallpox in 7 counties, with no deaths. The evidence makes it certain that probably twice or three times this number of cases existed, which should have been correctly diagnosed. Possibly a very large number of mild cases, unrecognizable by clinical diagnosis, occurred. The counties reporting smallpox were: Cass, 1; Clinton, 1; Dearborn, 3; Madison, 4; Marshall, 1; Montgomery, 1; Starke, 12; 23 cases in all.

October—Seventy-five cases of smallpox were reported from seven counties, with no deaths. In the corresponding month last year, 118 cases from 7 counties, with 3 deaths. The counties reporting the disease present were: Clinton, 4 cases; Elkhart, 5; Harrison, 2; Madison, 58; Marion, 2; Marshall, 1; Noble, 3.

November—One hundred and seven cases of smallpox were reported from 14 counties, with no deaths. In the corresponding month last year, 216 cases reported from 14 counties, with no deaths. The counties reporting the disease present were: Bartholomew, 1 case; Clay, 2; Daviess, 3; Elkhart, 15; Lagrange, 40; Madison, 21; Marshall, 1; Miami, 1; Noble, 2; Parke, 1; Sullivan, 1; Tippecanoe, 1; Wayne, 12.

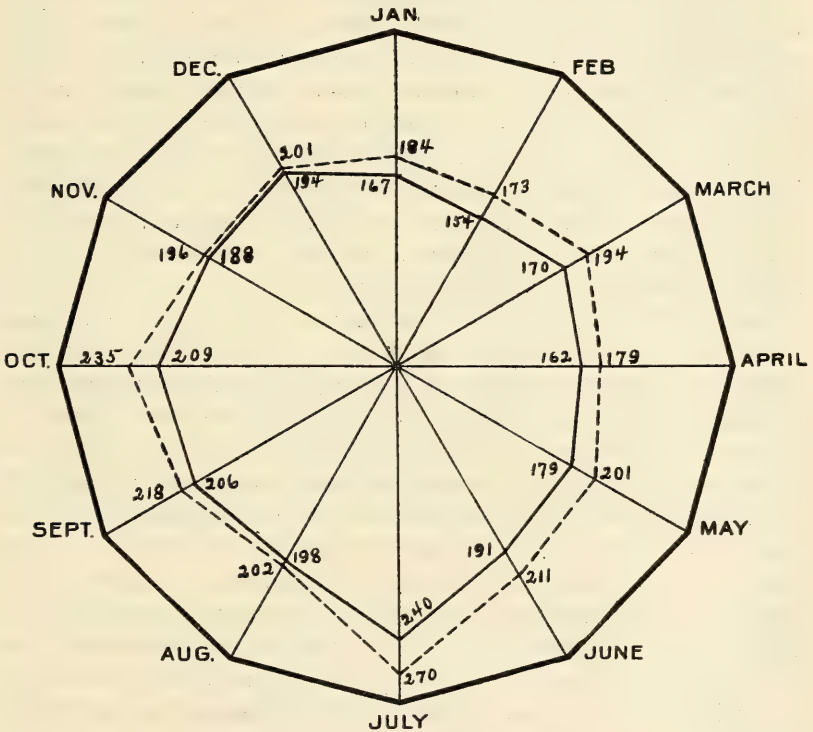
December—Two hundred and seven cases of smallpox in 18 counties, with no deaths. In the corresponding month last year, 393 cases in 19 counties, with 1 death. The disease was prevalent in the following counties: Allen, 2; Bartholomew, 1; Cass, 1; Clinton, 15; Elkhart, 45; Grant, 10; Johnson, 4; Lagrange, 60; Lawrence, 6; Madison, 38; Marion, 2; Marshall, 10; Miami, 5; Monroe, 2; Parke, 1; Rush, 1; St. Joseph, 12; Vigo, 1; Wayne, 2.

VIOLENCE.

The violence deaths numbered 2,464, as against 2,210 in 1906. The term violence includes accidents, suicides and homicides. The accidental deaths numbered 1,981, the suicides 361, and the homicides 122. No deaths by mob violence in 1907, and none since 1905.

The violence chart following compares the violence deaths with the average for the last eight years:

Comparison of 1907 with average of the last eight years.



—— Average deaths per month for eight years, 1900-1907.

---- Deaths per month for the year 1907.

Twelve months show more than average.

MONTHLY RECORD OF VIOLENCE DEATHS.

January—The deaths by violence numbered 140. In the corresponding month last year, 122. The cases were as follows: Murder, 2; suicide, 20; accidental, 118. Of the murders, 1 was by gunshot and 1 struck with an axe. Of the suicides, 4 chose shooting, 4 hanging, 1 cutting throat, 5 carbolic acid, 2 morphine, 3 arsenic, 1 asphyxiation with artificial gas. Of the accidental deaths, steam railroads killed 30; interurban cars, 3; fracture of skull and other bones, 14; mining accidents, 16; burns and scalds, 16; powder explosions, 9; falls, 5; gunshots, 4; electricity, 2; suffocation, 5; burning, 4; poison and other causes, the remainder.

February—The violent deaths numbered 131. In the same month last year, 109. The deaths were caused as follows: Murder, 6, 2 being females; suicides, 22, of which 9 were women and 13 men. The methods used were: Gunshots, 4 men; hanging, 4 men; cutting throat, 1 woman and 1 man; carbolic acid, 3 men and 2 women; morphine, 2 men; strychnine and other poisons, the remainder. The accidental deaths numbered 103. Killed by steam railroads, 15; by machinery, 2; burns and scalds, 15; crushing injuries, 33; horses and vehicles, 7; gunshots, 2; poisoning, 7; drowning, 4; suffocation and other methods, the remainder.

March—The deaths by violence numbered 166. In the same month last year, 112. Of the deaths by violence, 9 were murders, 36 suicides, and the remainder accidents. All the murders were by gunshots, 8 males and 1 female. Of the suicides, 6 were by gunshots, 3 drowning, 3 hanging, 15 carbolic acid, 6 by strychnine or morphine, and 3 by corrosive sublimate and other poisons. Of the accidental deaths, 24 were killed by steam railroads, 6 by street cars or interurbans, 25 by fractures or severe blows, 5 by machinery, 14 by burns and scalds, 3 by gunshots, 5 by drowning, 9 by falls, 3 by horses and vehicles, 11 by various poisonings, 5 by lightning and electricity, 6 by suffocation and strangulation, 2 by tetanus from wounds, 2 by blood-poisoning, and 2 by abortion.

April—Deaths by violence, 149. In the corresponding month last year, 124. Of the deaths by violence, 107 were males and 42 females. The murders numbered 6, 2 being by gunshots, 2 by sharp instruments, 1 by hanging and 1, an infant, by drowning. The suicides numbered 26, by gunshots 8, cutting throat 1, hanging 2, drowning 2, carbolic acid 6, morphine 5, strychnine 2. Accidental deaths, 117; by steam railroads, 19; street cars and interurbans, 6; automobiles, 1; horses and vehicles, 15; fractures and concussions, 20; machinery, 2; burns and scalds, 28; falls, 15; gunshots, 1; poi-

sons, 4; electricity, 2; lightning, 1; suffocation, 6; explosions, 3; and the remainder in various ways.

May—Deaths by violence, 180. Murders, 13; suicides, 36; accidental, 131. Of the murders, males 9, females 4, 8 were by gunshots, 4 cutting and stabbing, 1 drowned (a child). Of the suicides, males 27, females 9. Methods used: Gunshots, 6 males, 1 female; cutting arteries, males 2, females 2; wood alcohol, female 1; hanging, males 4, female 1. Of the accidental deaths: Steam railroads, males 36, female 1; trolley cars, males 3; fractures and crushing injuries, males 17, females 3; machinery, males 4; burns and scalds, males 2, females 11; drowning, males 8, female 1; gunshots, males 4; nitro-glycerine, males 6; falls, males 8, females 2; carbolic acid, males 2, females 2; ptomaine poisoning, male 1, females 2; tetanus (lockjaw, classed as accidental, because always depending upon accident), males 3, females 2; electricity, males 2; horses and vehicles, males 5, female 1; suffocation, male 1, females 3; other methods, 4.

June—Deaths by violence, 184. In the corresponding month last year, 164. Of the deaths by violence, 152 were males and 32 females. The murders numbered 7, suicides 39, accidental, 138. Of the murders, 5 were males and 2 females. Four were shot, one killed by knife wounds and one by carbolic acid. Of the 30 suicides, 16 chose gunshots, 6 hanging, 3 drowning, 6 carbolic acid, 2 knife wounds, 2 morphine, 3 poison, 1 fracture of skull by jumping from jail balcony. Of the 138 accidental deaths, 35 were on steam railroads, 2 by street cars, 2 by automobiles; crushing injuries, 25; gunshots, 3; drowning, 32; burns and scalds, 9; blood poisoning, 5; mining, 1; lightning, 6; electricity, 4; horses and vehicles, 5; poisoning, 7. It is to be noted that this month horses and vehicles killed 5, while automobiles only killed 2.

July—Deaths by violence, 225. In the corresponding month last year there were 177 deaths. In the preceding month there were 184 deaths. Of the deaths by violence, 180 were males and 45 were females. The murders numbered 12; suicides, 35; accidents, 178. Of the murders, 9 were males and 3 females. Ten were shot, 1 stabbed, and one killed with blunt instrument. Of the 35 suicides, 10 used firearms, 3 strychnia and arsenic, 3 hanging, 2 opium, and 1 liniment. Of the 178 accidents, 31 were railroad accidents, 11 interurbans and street cars, 1 by automobile, 2 fractured skull, 2 fractured femur, 1 fracture of other bones, 1 concussion, 2 crushing injuries, 16 burns and scalds, 46 drowning, 4 gunshots, 15 falling, 5 tetanus, 6 mine accidents, 3 ptomaine poison, 8 lightning, 7

poisons, 7 sunstroke and heat prostration, 1 cutting with knife, 1 struck by fork, 4 by horses and vehicles, 1 amputation of leg, 2 strangulation, and 1 unknown.

August—Deaths from violence, 186. In the corresponding month last year, 194. In the preceding month, 225. The murders numbered 11, 9 males and 2 females. Methods of murder: Gunshots, 6; cutting or stabbing, 1; blow by shovel handle, 1. Suicides numbered 17, 13 males and 4 females. Methods chosen were: Gunshots, 7; hanging, 1; burning, 2; carbolic acid, 3; arsenic, 4. Of the 158 accidental deaths, 47 were on steam railroads; street cars and interurbans, 6; fracture of skull and other bones, 14; burns and scalds, 16; gunshot, 1; drowning, 21; electricity, 5; lightning, 1; concussion of brain, 2; machinery, 2; falls, 21; suffocation and asphyxiation, 6; carbolic acid, 2; other poisons, 2; mining, 3; horses and vehicles, 4; gored by bull, 1; sunstroke, 3; not named, 2. Of the violent deaths, 151 were males and 35 females.

September—Deaths from violence, 199. In the corresponding month last year, 195. In the preceding month, 186. The murders numbered, 9; the suicides, 34; accidental, 146. Of the murders, all were males. Methods: Gunshots 8, blow on head 1. Of the 34 suicides, 8 were females and 26 males. Methods chosen were: Gunshots, 9 males; hanging, 7 males; knife wounds, 2 males; carbolic acid, 4 males, 1 female; strychnine, 1 male and 1 female; paris green, 1 male and 2 females. Of the 146 accidental deaths, 49 were by steam railroads, 5 by street cars and interurbans, 21 by fractures and crushing injuries, 14 by burns and scalds, 17 by drowning, 6 by gunshots, 15 by falls, 3 choked to death by food, 4 asphyxiated by gas, 2 by morphine, 11 by horses and vehicles, 2 by mining, 2 by lightning, 6 by various poisons, 2 by blood poisoning; not named, 5.

October—Deaths from violence, 219. In the corresponding month last year, 179. There were 13 murders, 29 suicides and 175 accidental deaths. Of the murdered persons, all were males. Ten were killed by gunshots, 1 by fracture of skull, 1 by stabbing, and 1 not named. Of the 29 suicides, 9 were women. The methods chosen were: Gunshots, 6 males, 2 females; hanging, 4 males, 3 females; paris green, 1 male and 1 female. Of the accidental deaths, steam railroads caused 38; street cars and interurbans, 10; burns and scalds, 14; gunpowder explosion, 28; drowning, 6; gunshots, 4; crushing injuries, 39; horses and vehicles, 11; asphyxiation and suffocation, 9; electricity, 3; drinking concentrated lye, 2; opium, 4; strychnia and chloral hydrate, 2; other poisons, 3; and the remainder by various methods.

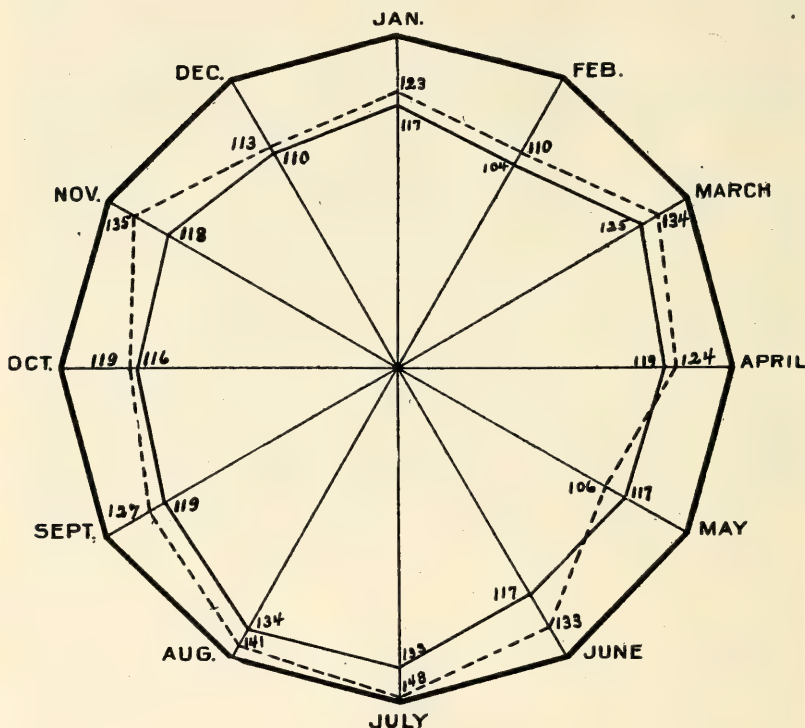
November—Deaths from violence, 176; corresponding month last year, 184. There were 13 murders, 26 suicides and 137 accidental deaths. Of the murders, 10 were males and 3 females. Seven males and 2 females were murdered by gunshots, 1 male by cutting of throat, and 3 males killed by blows from blunt instruments. Of the 26 suicides, 19 were males, 7 females. Eight males chose gunshots, 3 males and 2 females chose hanging, 1 male drowned himself, and 7 males and 5 females poisoned themselves. Of the accidental deaths, steam railroads killed 30; street cars and interurbans, 4; fractures and crushing injuries, 12; burns and scalds, 26; gunshots, 6; drowning, 2; horses and vehicles, 9; falls, 17; electricity, 3; poisons, 7, and other methods, the remainder.

December—Deaths from violence numbered 184. In the corresponding month last year, 185. The causes were: Murder, 12; suicides, 33; accidental, 139. Of the 12 murders, 7, all males, were by gunshots; by stabbing, 1 male and 1 female; by blunt instruments, 1 male; by suffocation and strangulation, 1 female and 1 male. Of the suicides, 13 were by gunshots, 12 males and 1 female; 7 were by hanging, 6 males and 1 female; 2 were by cutting throat, both males; 9 were by carbolic acid, 3 males and 6 females; other poisons, 2 males. Of the accidental deaths, steam railroads caused 36; street cars and interurbans, 7; fractures, falls and crushing injuries, 33; burns and scalds, 20; gunshots, 5; drowning, 3; machinery, 5; mine accidents, 2; electricity, 2; injury at birth, 5; ptomaine poisoning, 2; asphyxiation and suffocation, 7; poisons, 6; alcoholism, 3; exposure to cold, 2; wound infection, 1.

CANCER.

Cancer is an increasing cause of death in Indiana. The chart following shows this to be true. The number of cancer deaths in 1907 was 1,513, the rate being 55.7 per 100,000.

Comparison of 1907 with average of the last eight years.



- Average deaths per month for eight years, 1900-1907.
 - - - Deaths per month for the year 1907.
 Eleven months show more than average.
 One month shows less than average.

MONTHLY ANALYSIS OF DISEASE PREVALENCE.

January—Bronchitis was reported as the most prevalent disease, and tonsillitis, which was reported as most prevalent in November and December, fell to third place. Pneumonia was fourth in area of prevalence. The order of prevalence was as follows: Bronchitis, influenza, tonsillitis, pneumonia, rheumatism, scarlet fever, diphtheria and membranous croup, typhoid fever (enteric), measles, pleuritis, erysipelas, diarrhoea, smallpox, intermittent and remittent fever, typho-malaria fever, whooping cough, inflammation of bowels, cerebrospinal meningitis, puerperal fever, cholera morbus, dysentery, cholera infantum.

February—Influenza was reported as the most prevalent malady. Pneumonia, which was fourth in the preceding month, rises to third place this month. The order of prevalence is as follows: Influenza, bronchitis, pneumonia, tonsillitis, rheumatism, measles, scarlet fever, typhoid fever, pleuritis, diphtheria and croup, diarrhoea, smallpox, whooping cough, intermittent fever, erysipelas, inflammation of bowels, typho-malaria fever, cerebrospinal meningitis, dysentery, puerperal fever, cholera morbus, cholera infantum.

March—Influenza was reported as the most prevalent malady, and this was true also of the preceding month. In the corresponding month last year, tonsillitis was the most prevalent. Pneumonia was the third most prevalent disease in February, and it fell to fifth place this month. The order of prevalence as reported was as follows: Influenza, tonsillitis, rheumatism, measles, pneumonia, bronchitis, diphtheria and croup, scarlet fever, pleuritis, intermittent and remittent fever, typhoid fever, diarrhoea, smallpox, whooping cough, inflammation of bowels, erysipelas, dysentery, typho-malaria fever, cerebrospinal meningitis, puerperal fever, cholera morbus, cholera infantum.

April—Tonsillitis was reported as the most prevalent disease. In the preceding month, influenza occupied this position. In the corresponding month last year, rheumatism was reported to be the most prevalent. Measles, which existed in every county in the state, causing forty-two deaths, and in some instances appearing in extra epidemic form, was, nevertheless, the fifth most prevalent malady. The order of prevalence as reported was as follows: Tonsillitis, bronchitis, rheumatism, influenza, measles, pneumonia, typhoid fever (enteric), pleuritis, intermittent fever, scarlet fever, diarrhoea, diphtheria and membranous croup, whooping cough, smallpox, inflammation of bowels, erysipelas, typho-malaria fever,

puerperal fever, dysentery, cholera morbus, cerebrospinal meningitis, cholera infantum.

May—Measles was reported the most prevalent disease. It appeared in every county; in many places it was epidemic and closed the schools. Nevertheless, it was not as bad as in the preceding month, when there were 42 measles deaths, against 19 this month. In May last year rheumatism was the most prevalent disease. The order of prevalence this month was: Measles, rheumatism, bronchitis, tonsillitis, influenza, pneumonia, typhoid fever, scarlet fever, diarrhoea, intermittent fever, diphtheria, smallpox, pleuritis, whooping cough, erysipelas, inflammation of bowels, cholera morbus, puerperal fever, typho-malaria fever, dysentery, cerebrospinal meningitis, cholera infantum.

June—Measles was reported as the most prevalent disease. In the preceding month measles also occupied this position. In the corresponding month last year rheumatism was the most prevalent malady. Although measles was the most prevalent disease, and although it stood fifth in prevalence in April, still the deaths were fewer, being 16 for June and 42 for April. The order of disease prevalence as reported is as follows: Measles, rheumatism, tonsillitis, diarrhoea, bronchitis, typhoid fever, cholera morbus, intermittent and remittent fever, smallpox, diphtheria, membranous croup, pneumonia, scarlet fever, inflammation of bowels, cholera infantum, dysentery, erysipelas, influenza, pleuritis, whooping cough, puerperal fever, typho-malaria fever, cerebrospinal meningitis.

July—Diarrhoea was reported the most prevalent disease. In the preceding month measles was first on the list. In the corresponding month last year diarrhoea was the most prevalent disease. Diarrhoeal diseases caused 415 deaths during the month, and for the corresponding month last year, 361 deaths. The order of disease prevalence is as follows: Diarrhoea, typhoid fever, cholera infantum, cholera morbus, measles, dysentery, rheumatism, tonsillitis, intermittent and remittent fever, bronchitis, inflammation of bowels, smallpox, diphtheria and membranous croup, scarlet fever, whooping cough, typho-malaria fever, pneumonia, erysipelas, pleuritis, puerperal fever, influenza, cerebrospinal meningitis.

August—Typhoid fever was reported to be the most prevalent disease. In the preceding month diarrhoeal diseases were reported first. In the corresponding month last year diarrhoeal diseases were first. The order of disease prevalence as reported is as follows: Typhoid fever, diarrhoea, rheumatism, cholera morbus, tonsillitis, cholera infantum, dysentery, bronchitis, intermittent fever, inflammation of bowels, measles, diphtheria and croup,

typho-malaria fever, scarlet fever, influenza, smallpox, pneumonia, pleuritis, whooping cough, erysipelas, puerperal fever, cerebrospinal meningitis.

September—As in the preceding month, typhoid fever was reported to be the most prevalent disease. In the corresponding month last year rheumatism was reported as most prevalent. The order of prevalence was as follows: Typhoid fever, tonsillitis, rheumatism, bronchitis, diarrhoea, intermittent fever, dysentery, diphtheria and croup, cholera infantum, cholera morbus, pneumonia, scarlet fever, influenza, inflammation of bowels, typho-malaria fever, erysipelas, measles, pleuritis, whooping cough, smallpox, puerperal fever, cerebrospinal meningitis, chickenpox.

October—Typhoid fever was reported to be the most prevalent disease. This was also true for the preceding month. Tonsillitis was the most prevalent in October of the preceding year. The order of prevalence was as follows: Typhoid fever, bronchitis, tonsillitis, rheumatism, diphtheria and croup, pneumonia, influenza, diarrhoea, intermittent fever, scarlet fever, pleuritis, inflammation of bowels, measles, dysentery, erysipelas, cholera infantum, typho-malaria fever, whooping cough, chickenpox, cholera morbus, smallpox, puerperal fever, cerebrospinal meningitis.

November—Bronchitis and tonsillitis were reported to be the most prevalent diseases. Typhoid fever was reported most prevalent in October, and falls to third place in November. Tonsillitis and bronchitis were also reported as the most prevalent maladies in November of last year. The order of disease prevalence was as follows: Bronchitis, tonsillitis, typhoid fever, rheumatism, influenza, pneumonia, diphtheria and croup, diarrhoea, pleuritis, scarlet fever, intermittent fever, measles, chickenpox, erysipelas, smallpox, dysentery, inflammation of bowels, whooping cough, puerperal fever, typho-malaria fever, cholera morbus, cerebrospinal meningitis, cholera infantum.

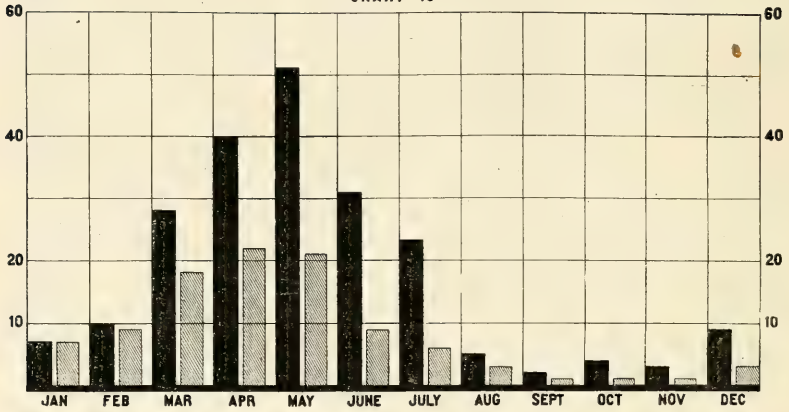
December—Bronchitis, tonsillitis and influenza were reported to be the most prevalent diseases. This was also true for the corresponding month last year and for the preceding month. Typhoid fever had stood third in November and fell to seventh place in December. The order of disease prevalence was as follows: Bronchitis, tonsillitis, influenza, rheumatism, pneumonia, typhoid fever (enteric), diphtheria and membranous croup, scarlet fever, pleuritis, diarrhoea, measles, chickenpox, smallpox, intermittent and remittent fever, erysipelas, inflammation of the bowels, whooping cough, puerperal fever, cholera morbus, dysentery, typho-malaria fever, cholera infantum, cerebrospinal meningitis.

MEASLES DEATHS BY MONTHS

■ - 1907

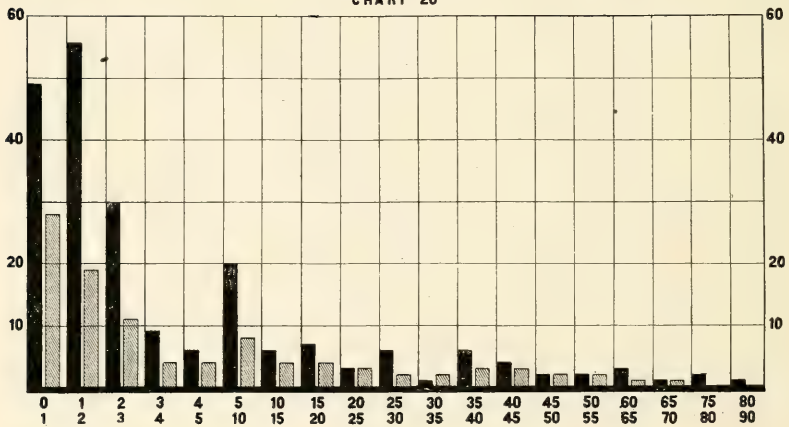
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 19



BY AGES

CHART 20



TABLES

OF

ANNUAL STATISTICAL REPORT

FOR THE YEAR 1907.

TABLE 1.

*Deaths in Indiana During the Year Ending December 31, 1907,
Statistically Classified by the International System, with Rates
Per 100,000 Population, Based Upon School Census of 1907
multiplied by $3\frac{1}{2}$ —2,714,744.*

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
I. GENERAL DISEASES—EPIDEMICS.			
1	Typhoid fever.....	933	34.3
2	Exanthematous typhus.....		
3	Recurrent fever.....		
4	Intermittent and malarial fever.....	81	2.9
5	Variola or smallpox.....	8	.2
6	Measles.....	213	7.8
7	Scarlatina.....	91	3.3
8	Whooping cough.....	136	5.0
9	Croup.....	17	.6
9a	Diphtheria.....	336	12.3
10	Influenza.....	666	24.5
11	Miliary fever.....		
12	Asiatic cholera.....		
13	Cholera nostras.....	19	.7
14	Dysentery.....	242	8.9
15	Bubonic plague.....		
16	Yellow fever.....		
17	Leprosy.....		
18	Erysipelas.....	77	2.8
19	Other epidemic diseases.....	6	.2
20	Purulent septicemia and infection.....	166	6.1
21	Glanders and farcy.....		
22	Malignant pustule and anthrax.....	2	.07
23	Rabies.....	3	.1
24	Actinomycosis, trichinosis, etc.....	1	.03
25	Pellegra.....		
26	Tuberculosis of the larynx.....	51	1.8
27	Tuberculosis of the lungs.....	3,837	141.3
28	Tuberculosis of the meninges.....	220	8.1
29	Abdominal tuberculosis.....	241	8.8
30	Pott's disease.....	17	.6
31	Cold abscess.....		
32	White swelling.....	20	.7
33	Tuberculosis of other organs.....	63	2.3
34	General tuberculosis.....	73	2.6

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
35	Scrofula.....	9	.3
36	Syphilis.....	69	2.5
36a	Soft chancre.....		
37	Gonorrhea (5 years and over).....	1	.03
38	Gonorrhea (under 5 years).....		
39	Cancer and other malignant tumors of the buccal cavity.....	62	2.2
40	Cancer and other malignant tumors of the stomach and liver.....	591	21.7
41	Cancer and other malignant tumors of the peritoneum, intestines and rectum.....	151	5.5
42	Cancer and other malignant tumors of the female genital organs.....	206	7.5
43	Cancer and other malignant tumors of the breast.....	130	4.7
44	Cancer and other malignant tumors of the skin.....	89	3.2
45	Cancer and other malignant tumors of other organs.....	284	10.4
46	Other tumors.....	36	1.3
47	Acute articular rheumatism.....	115	4.2
48	Chronic rheumatism and gout.....	70	2.5
49	Scurvy.....	4	.1
50	Diabetes.....	252	9.2
51	Exophthalmic goitre.....	24	.8
52	Addison's disease.....	5	.1
53	Leukemia.....	22	.8
54	Anemia chlorosis.....	102	3.7
55	Other general diseases.....	26	.9
56	Alcoholism, acute and chronic.....	124	4.5
57	Chronic lead poisoning.....	1	.03
58	Other chronic poisonings (occupational).....		
59	Other chronic poisonings.....	16	.5
II. LOCAL DISEASES—DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.			
60	Encephalitis.....	56	2.0
61	Simple meningitis.....	384	14.1
61a	Epidemic cerebro-spinal meningitis.....	180	6.6
62	Progressive locomotor ataxia.....	45	1.6
63	Other diseases of the spinal cord.....	127	4.6
64	Congestion and hemorrhage of the brain.....	1,599	58.9
65	Softening of the brain.....	112	4.1
66	Paralysis, cause unspecified.....	691	25.4
67	General paralysis.....	116	4.2
68	Other forms of insanity.....	75	2.7
69	Epilepsy.....	142	5.2
70	Convulsions (non-puerperal; 5 years and over).....	10	.3
71	Convulsions (under 5 years).....	221	8.1
72	Tetanus.....	59	2.1
73	Chorea.....	7	.2
74a	Other diseases of the brain.....	73	2.6
74b	Other diseases of the nervous system.....	58	2.1
75	Diseases of the eye and its adnexa.....	1	.03
76	Diseases of the ear.....	18	.6
III. DISEASES OF THE CIRCULATORY SYSTEM.			
77	Pericarditis.....	48	1.7
78	Acute endocarditis.....	162	5.9
79	Organic diseases of the heart.....	2,766	101.8
80	Angina pectoris.....	252	9.2
81	Diseases of the arteries, atheroma, aneurism, etc.....	264	9.7
82	Embolism and thrombosis.....	57	2.0
83	Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....	10	.3
84	Diseases of the lymphatic system (lymphangitis, etc.).....	4	.1
85	Hemorrhages.....	39	1.4
86	Other diseases of the circulatory system.....	1	

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
IV. DISEASES OF THE RESPIRATORY SYSTEM.			
87	Diseases of the nasal fossae.....	1	.03
88	Diseases of the larynx.....	36	1.3
89	Diseases of the thyroid body.....	4	.1
90	Acute bronchitis.....	246	9.0
91	Chronic bronchitis.....	185	6.8
92	Broncho-pneumonia.....	585	21.5
93	Pneumonia.....	2,353	86.6
94	Pleurisy.....	56	2.0
95	Congestion and apoplexy of the lungs.....	264	9.7
96	Gangrene of the lungs.....	5	.1
97	Asthma.....	93	3.4
98	Pulmonary emphysema.....	10	.3
99	Other diseases of the respiratory system (phthisis excepted).....	93	3.4
V. DISEASES OF THE DIGESTIVE SYSTEM.			
100	Diseases of the mouth and adnexa.....	20	.7
101	Diseases of the pharynx.....	41	1.5
102	Diseases of the esophagus.....	11	.4
103	Ulcer of the stomach.....	75	2.7
104	Other diseases of the stomach (cancer excepted).....	542	19.9
105	Diarrhoea and enteritis (under 2 years).....	1,620	59.6
105a	Chronic diarrhoea (under 2 years).....	19	.6
106	Diarrhoea and enteritis (2 years and over).....	586	21.5
107	Intestinal parasites.....	1	.03
108	Hernia and intestinal obstruction.....	292	10.8
109	Other diseases of the intestines.....	116	4.2
110	Acute yellow atrophy of the liver.....	13	.4
111	Hydatid tumors of the liver.....		
112	Cirrhosis of the liver.....	236	8.6
113	Biliary calculi.....	76	2.7
114	Other diseases of the liver.....	236	8.6
115	Diseases of the spleen.....	3	.1
116	Simple peritonitis (non-puerperal).....	222	8.1
117	Other diseases of the digestive system (cancer and tuberculosis excepted).....	7	.2
118	Appendicitis and abscess of the iliac fossae.....	205	7.5
VI. DISEASES OF THE GENITO-URINARY SYSTEM.			
119	Acute nephritis.....	169	6.2
120	Bright's disease.....	1,644	60.5
121	Other diseases of the kidneys and their adnexa.....	49	1.8
122	Calculi of the urinary tract.....	7	.2
123	Diseases of the bladder.....	123	4.5
124	Diseases of the urethra, urinary abscess, etc.....	11	.4
125	Diseases of the prostate.....	75	2.7
126	Nonvenereal diseases of the male genital organs.....	1	.03
127	Metritis.....	4	.1
128	Uterine hemorrhage (nonpuerperal).....	7	.2
129	Uterine tumor (noncancerous).....	31	1.1
130	Other diseases of the uterus.....	35	1.2
131	Cysts and other tumors of the ovary.....	25	.9
132	Other diseases of the female genital organs.....	20	.7
133	Nonpuerperal diseases of the breast (cancer excepted).....	1	.03
VII. PUERPERAL DISEASES.			
134	Accidents of pregnancy.....	41	1.5
135	Puerperal hemorrhage.....	26	.9
136	Other accidents of labor.....	12	.4
137	Puerperal septicemia.....	196	7.2

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
138	Puerperal albuminuria and convulsions.....	55	2.0
139	Phlegmasia alba dolens (puerperal).....		
140	Other puerperal accidents—sudden death.....	14	.5
141	Puerperal diseases of the breast.....	1	.03
VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.			
142	Gangrene.....	115	4.2
143	Carbuncle.....	14	.5
144	Acute abscess, phlegmon.....	14	.5
145	Other diseases of the skin and its adnexa.....	21	.7
IX. DISEASES OF THE LOCOMOTOR SYSTEM.			
146	Nontuberculous diseases of the bones.....	33	1.2
147	Arthritis and other diseases of the joints (tuberculosis and rheumatism excepted)....	2	.07
148	Amputation.....	1	.03
149	Other diseases of the organs of locomotion.....	1	.03
X. MALFORMATIONS.			
150	Malformations.....	266	9.7
XI. DISEASES OF INFANCY.			
151	Congenital debility, icterus, sclerema.....	1,660	61.1
152	Other diseases peculiar to early infancy.....	71	2.6
153	Lack of care.....	52	1.9
XII. DISEASES OF OLD AGE.			
154	Senile debility.....	1,090	40.1
XIII. EXTERNAL CAUSES.			
A.—Suicides.			
155	Suicide by poison.....	163	6.
156	Asphyxia.....	6	.2
157	Hanging or strangulation.....	50	1.8
158	Drowning.....	19	.7
159	Firearms.....	105	3.8
160	Cutting instruments.....	11	.4
161	Jumping from high places.....	4	.1
162	Crushing.....	1	.03
163	Other suicides.....	2	.07
B.—Accidents.			
164	Fractures.....	113	4.1
165	Dislocations.....	7	.2
166a	Accidental gun shot wounds.....	46	1.6
166b	Injuries by machinery.....	49	1.8
166c	Injuries in mines and quarries.....	53	1.9
166d	Railroad accidents and injuries.....	508	18.7
166e	Injuries by horses and vehicles.....	80	2.9
166f	Other accidental traumatisms.....	366	13.4
167	Burns and scalds.....	207	7.6
168	Burns from corrosive substances.....		
169	Sunstroke.....	26	.9
170	Freezing.....	7	.2
171	Electric shock.....	45	1.6
172	Accidental drowning.....	153	5.6
173	Inanition (starvation).....	39	1.4
174	Absorption of deleterious gases (nonsuicidal).....	21	.7
175	Other acute poisonings.....	104	3.8
176	Other external violence.....	157	5.7

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
	<i>C.—Homicides.</i>		
176a	Homicide.....	122	4.4
176b	Mob violence.....		
	XIV. CAUSES ILL-DEFINED.		
177	Dropsy.....	73	2.6
178	Sudden death.....	3	.1
179	Unspecified or ill-defined causes of death.....	278	10.2
	XV. STILLBIRTHS.		
180	Stillbirths.....	2,019	74.3
	All causes.....	36,461	1,343.0

25.	Pellegri.....	6	3	9	6	4	5	1	2	7	5	3
26.	Tuberculosis of the larynx.....	324	389	387	386	325	298	313	310	269	271	279
27.	Tuberculosis of the lungs.....	18	12	20	27	21	26	27	17	14	9	12
28.	Tuberculosis of the meninges.....	13	11	19	22	19	20	21	31	22	18	21
29.	Abdominal tuberculosis.....											
30.	Pott's disease.....			1	5	2	1		2	3	2	
31.	Cold abscess.....											
32.	White swelling.....	1	2	1	1	3	1	3	2	3	2	
33.	Tuberculosis of other organs.....	10	6	8	5	2	1	7	7	2	4	7
34.	General tuberculosis.....	1	5	4	3	8	4	5	18	12	4	7
35.	Scrofula.....	1	1	1		2	1	2			1	
36.	Syphilis.....	1	4	5	7	11	1	1	11	4	10	9
36a.	Soft chancre.....											
37.	Gonorrhea (5 years and over).....									1		
38.	Gonorrhea (under 5 years).....											
39.	Cancer and other malignant tumors of the buccal cavity.....	4	5	9	4	4	4	5	10	3	4	6
40.	Cancer and other malignant tumors of the stomach and liver.....	53	36	41	51	37	62	54	52	49	53	44
41.	Cancer and other malignant tumors of the peritoneum, intestines and rectum.....	9	15	16	12	14	14	16	8	13	14	8
42.	Cancer and other malignant tumors of the female genital organs.....	19	15	23	18	15	17	18	19	9	20	13
43.	Cancer and other malignant tumors of the breast.....	16	8	12	9	8	9	6	19	10	15	9
44.	Cancer and other malignant tumors of the skin.....	3	4	9	7	7	9	12	7	6	12	6
45.	Cancer and other malignant tumors of other organs.....	19	27	24	23	21	18	37	26	20	17	27
46.	Other tumors.....	2	5	1	3	2	3	3	7	3	3	2
47.	Acute articular rheumatism.....	8	8	10	15	10	18	3	4	5	12	11
48.	Chronic rheumatism and gout.....	5	7	12	10	8	5	5	1	4	6	4
49.	Scurvy.....		1			1	1					
50.	Diabetes.....	21	20	23	19	18	27	17	11	16	31	23
51.	Exophthalmic goitre.....	2	2	2	4	2	2	1	1	1	3	3
52.	Addison's disease.....			2	1	1	1	1		1	1	1
53.	Leukemia.....	1		2	1	1	1	5	2	2	5	
54.	Anemia, chlorosis.....	9	7	9	11	9	9	5	15	10	6	6
55.	Other general diseases.....	2		2		2	2	3	1	3	7	4
56.	Alcoholism, acute and chronic.....	8	11	6	8	8	9	13	16	9	16	11
57.	Chronic lead poisoning.....						1					
58.	Other chronic poisonings (occupational).....											
59.	Other chronic poisonings.....	1	2	2		1	1		3	3	1	2
II. LOCAL DISEASES—DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.												
60.	Encephalitis.....	10	5	4	4	11	1	4	7	2	3	3
61.	Simple meningitis.....	31	27	50	47	42	28	36	28	22	19	26
61a.	Epidemic cerebro-spinal meningitis.....	24	19	21	14	13	12	13	14	11	9	18
62.	Progressive locomotor ataxia.....	3	4	3	4	3	3	3	5	6	7	3
63.	Other diseases of the spinal cord.....	14	12	9	9	11	10	9	18	4	10	11

TABLE No. 2—Continued.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
64. Congestion and hemorrhage of the brain	142	129	144	142	132	122	118	134	126	131	129	150
65. Softening of the brain	6	19	14	9	9	2	6	10	11	6	8	11
66. Paralysis, cause unspecified	60	65	62	69	56	64	64	55	45	53	41	57
67. General paralysis	5	11	4	10	6	10	13	17	12	13	7	8
68. Other forms of insanity	1	7	7	8	2	4	9	8	5	6	10	8
69. Epilepsy	7	14	5	16	13	19	8	16	11	10	12	11
70. Convulsions (non-puerperal; 5 years and over)			2	3				1	1	1		2
71. Convulsions (under 5 years)	37	21	27	18	15	13	21	11	17	14	13	14
72. Tetanus		3	4	2		3	12	12	8	4	3	1
73. Chorea	1		1		1		1		2			1
74a. Other diseases of the brain			6	6	9	7	2	4	6	7	6	7
74b. Other diseases of the nervous system	11	6	1	6	4	3	4	3	4	7	3	6
75. Diseases of the eye and its adnexa												
76. Diseases of the ear	2	1	1		2	4		1	1	1	2	3
• III. DISEASES OF THE CIRCULATORY SYSTEM.												
77. Pericarditis		2	7	4	4	4	5	3	9	2	4	4
78. Acute endocarditis	13	11	16	17	13	17	18	9	21	8	13	6
79. Organic diseases of the heart	204	204	239	220	251	218	246	196	222	251	242	273
80. Angina pectoris	21	26	20	26	23	20	15	29	18	21	11	22
81. Diseases of the arteries, atheroma, aneurism, etc.	26	23	24	24	21	30	12	29	14	20	20	21
82. Embolism and thrombosis												
83. Diseases of the veins (varices, hemorrhoids, phlebitis, etc.)	5	5	4	6	1	9	1	4	7	7	2	6
84. Diseases of the lymphatic system (lymphangitis, etc.)	1	1	2	1	1	1		1			2	
85. Hemorrhages	9	5	3	1	4	3	2	4			4	4
86. Other diseases of the circulatory system											1	
IV. DISEASES OF THE RESPIRATORY SYSTEM.												
87. Diseases of the nasal fossæ												
88. Diseases of the larynx	4	4	3	4	3	2	1	2	2	4	4	3
89. Diseases of the thyroid body								1			1	
90. Acute bronchitis	38	39	27	21	19	16	9	8	14	17	19	19
91. Chronic bronchitis	19	28	18	14	20	14	13	7	9	8	17	18

92.	Broncho-pneumonia.....	76	106	78	56	52	33	10	11	14	42	49	58
93.	Pneumonia.....	343	501	420	200	193	89	41	43	52	92	156	223
94.	Pleurisy.....	5	8	5	5	3	9	6	2	4	2	4	3
95.	Congestion and apoplexy of the lungs.....	26	39	34	34	31	22	11	14	9	11	13	20
96.	Gangrene of the lungs.....		1			1	1			1		1	
97.	Asthma.....	10	13	5	4	8	5	4	6	9	11	8	10
98.	Pulmonary emphysema.....	2	3	1	2		1				1		
99.	Other diseases of the respiratory system (phthisis excepted).....	10	8	10	7	6	8	5	13	7	1	7	11

V. DISEASES OF THE DIGESTIVE SYSTEM.

100.	Diseases of the mouth and adnexa.....	4		4	1	2		4	1	2	1	1	
101.	Diseases of the pharynx.....	4	2	5	2	5	4	2	4	1	3	3	6
102.	Diseases of the esophagus.....		1	1	1	2	1		1	1	1	2	
103.	Ulcer of the stomach.....	1	4	5	10	3	5	8	5	6	11	9	8
104.	Other diseases of the stomach (cancer excepted).....	35	38	64	55	40	39	52	58	39	43	30	49
105.	Diarrhea and enteritis (under 2 years).....	32	32	35	18	35	80	395	502	275	153	38	25
105a.	Chronic diarrhea (under 2 years).....	2					1	1	1	5	7	2	
106.	Diarrhea and enteritis (2 years and over).....	33	31	36	33	26	44	88	125	75	43	33	19
107.	Intestinal parasites.....						1						
108.	Hernia and intestinal obstruction.....	28	18	22	23	21	18	27	27	35	25	28	20
109.	Other diseases of the intestines.....	11	7	9	8	8	7	20	10	14	8	7	7
110.	Acute yellow atrophy of the liver.....					1		3	4		1	1	3
111.	Hydatid tumors of the liver.....												
112.	Cirrhosis of the liver.....	21	16	20	20	12	22	23	18	15	26	19	24
113.	Biliary calculi.....	2	4	6	3	8	5	6	10	8	6	12	6
114.	Other diseases of the liver.....	23	21	22	24	18	20	14	15	24	18	19	18
115.	Diseases of the spleen.....							2		1			
116.	Simple peritonitis (non-puerperal).....	23	14	29	21	19	27	11	22	17	13	14	12
117.	Other diseases of the digestive system (cancer and tuberculosis excepted).....			1	3	2		1					
118.	Appendicitis and abscess of the iliac fossa.....	15	19	17	17	17	14	32	16	12	10	17	19

VI. DISEASES OF THE GENITO-URINARY SYSTEM.

119.	Acute nephritis.....	19	20	11	12	15	10	14	8	12	10	20	18
120.	Bright's disease.....	155	144	167	136	141	134	119	191	128	118	148	133
121.	Other diseases of the kidneys and their adnexa.....	4	5	6	1	1	2	7	7	4	3	4	5
122.	Calculi of the urinary tract.....			2		1	1		1		1		1
123.	Diseases of the bladder.....	9	13	9	10	12	13	13	10	11	8	6	9
124.	Diseases of the urethra, urinary abscess, etc.....												
125.	Diseases of the prostate.....	1	1		2		1	1	1		3	1	1
126.	Non-venereal diseases of the male genital organs.....	5	5	6	7	8	5	5	10	6	5	5	8
127.	Metritis.....												
128.	Uterine hemorrhage (non-puerperal).....	2				1	1			1	1	1	1

TABLE No. 2—Continued.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
129. Uterine tumor (non-cancerous).....	2	.....	3	.....	2	3	6	3	3	5	1	3
130. Other diseases of the uterus.....	3	2	8	.....	3	1	4	4	2	2	1	5
131. Cysts and other tumors of the ovary.....	2	3	.....	3	.....	1	1	.....	3	3	4	2
132. Other diseases of the female genital organs.....	.....	2	3	.....	5	3	1	2	1	.....	1	1
133. Non-puerperal diseases of the breast (cancer excepted).....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
VII. PUERPERAL DISEASES.												
134. Accidents of pregnancy.....	.....	1	7	3	2	3	4	7	2	3	3	7
135. Puerperal hemorrhage.....	3	2	.....	1	3	2	2	4	3	3	2	1
136. Other accidents of labor.....	3	.....	.....	.....	.....	1	1	2	.....	.....	1	.....
137. Puerperal septicæmia.....	21	25	31	26	20	12	12	7	8	12	12	10
138. Puerperal albuminuria and convulsions.....	4	5	2	5	6	8	8	4	3	3	5	2
139. Plegmasia alba dolens (puerperal).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
140. Other puerperal accidents—sudden death.....	.....	1	1	1	3	1	2	1	2	2	.....	1
141. Puerperal diseases of the breast.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.												
142. Gangrene.....	13	14	9	6	10	8	14	11	7	8	4	11
143. Carbuncle.....	2	.....	2	1	2	2	.....	.....	1	1	2	1
144. Acute abscess, phlegmon.....	.....	1	2	2	.....	.....	2	2	2	2	1	.....
145. Other diseases of the skin and its adnexa.....	1	4	2	.....	2	2	.....	3	1	1	2	3
IX. DISEASES OF THE LOCOMOTOR SYSTEM.												
146. Non-tuberculous diseases of the bones.....	2	1	3	1	2	1	3	2	7	3	2	6
147. Arthritis and other diseases of the joints (tuberculosis and rheumatism excepted).....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
148. Amputation.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
149. Other diseases of the organs of locomotion.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
X. MALFORMATIONS.												
150. Malformations.....	20	15	17	24	22	28	21	20	28	30	12	29

XI. DISEASES OF INFANCY.

151.	Congenital debility, icterus, sclerema.....	150	2	161	138	133	148	124	125	153	130	118	127	153.
152.	Other diseases peculiar to early infancy.....			6	6	9	4	2	5	9	4	15	2	7
153.	Lack of care.....			2	2	3		5	7	7	6	8	6	6

XII. DISEASES OF OLD AGE.

154.	Senile debility.....	109	106	136	74	106	70	70	93	56	86	89	95
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XIII. EXTERNAL CAUSES.

A.—Suicides.

155.	Suicide by poison.....	11	12	25	11	17	8	22	7	13	13	13	11
156.	Asphyxia.....	1	2	1		2							
157.	Hanging or strangulation.....	4	2	1	3	4	6	4	1	7	6	5	7
158.	Drowning.....	3	2	3	2	2	4	4	4	1	1	1	
159.	Firearms.....	4	6	7	9	9	13	9	7	10	8	10	13
160.	Cutting instruments.....	1	1		1	1	3	1		1			2
161.	Jumping from high places.....	1	1		1		1	1		1			
162.	Crushing.....												
163.	Other suicides.....												

B.—Accidents.

164.	Fractures.....	10	17	17	9	12	7	3	7	11	4	9	7
165.	Dislocations.....	1	1	1		1				2	1		1
166a.	Accidental gunshot wounds.....	6	2	2		4	5	5		5	3	7	9
166b.	Injuries by machinery.....	2	3	9		2	4	1	3	4	7	6	8
166c.	Injuries in mines and quarries.....	15	5	3	2		3	6	4	3	3	6	3
166d.	Railroad accidents and injuries.....	49	20	28	29	42	45	46	57	57	50	40	45
166e.	Injuries by horses and vehicles.....	2	7	4	7	6	7	6	6	13	14	8	
166f.	Other accidental traumas.....	14	36	26	37	39	22	25	34	24	49	28	32
167.	Burns and scalds.....	23	17	14	25	11	10	17	14	13	20	23	20
168.	Burns from corrosive substances.....												
169.	Sunstroke.....						2	18	6				
170.	Freezing.....	2	2	1								1	1
171.	Electric shock.....	2		5	3	2	9	9	5	3	2	3	2
172.	Accidental Drowning.....	7	3	6	3	10	34	51	19	7	6	3	4
173.	Inanition (starvation).....												
174.	Absorption of deleterious gases (non-suicidal).....	2	6	3	4	3	3	7	2	5	1	2	1
175.	Other acute poisonings.....	3	2	1	3	3				2	4	2	3
176.	Other external violence.....	4	5	8	9	9	10	11	6	9	15	8	10
		19	17	19	14	11	6	14	8	16	15	8	10

TABLE No. 2—Continued.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
<i>C.—Homicides.</i>												
176a. Homicide.....	2	7	10	7	13	8	13	12	11	13	14	12
176b. Mob violence.....												
XIV. CAUSES ILL-DEFINED.												
177. Dropsy.....	6	4	9	8	3	6	9	4	3	7	8	6
178. Sudden death.....	1					2						
179. Unspecified or ill defined causes of death.....	13	24	13	23	11	6	24	50	33	39	25	17
XV. STILLBIRTHS.												
180. Stillbirths.....	170	176	192	161	176	138	168	175	149	152	167	195
Grand total.....	3,126	3,413	3,622	2,961	2,914	2,615	3,133	3,376	2,887	2,820	2,671	2,923

TABLE No. 2—Continued.

Deaths from all Causes, by Months, Ages, Color, Nationality and Condition, for the Year Ending December 31, 1907. International Classification.

	0	1	2	3	4	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70
I. GENERAL DISEASES—EPIDEMIC.																		
1. Typhoid fever.....	8	7	13	13	10	58	92	145	126	94	79	67	46	41	32	24	28	16
2. Exanthematous typhus.....																		
3. Recurrent fever.....																		
4. Intermittent and malarial fever.....	4	7	3	1		4		4	10	4	2	4	4		2	1		4
5. Variola or smallpox.....	1			1					1	1		1		1				1
6. Measles.....	49	55	30	9	6	20	6	7	3	6	1	6	4	2	2		3	1
7. Scarletina.....	4	7	15	13	7	31	8	5		1								
8. Whooping cough.....	73	39	14	8			1											
9. Croup.....	5	3	3	2	1	3												
9a. Diphtheria.....	15	31	32	49	29	124	32	7	8	3	1	2		1	1			
10. Influenza.....	26	12	5	3		4	6	11	11	5	18	14	9	23	26	38	24	73
11. Miliary fever.....																		
12. Asiatic cholera.....																		
13. Cholera nostras.....							1	1				1		1			3	2
14. Dysentery.....			13	3	2	7	2		4	1	2	8	2	1	13	12	16	17
15. Bubonic plague.....																		
16. Yellow fever.....																		
17. Leprosy.....																		
18. Erysipelas.....	23	1						3	1	2	3	2	3	3	1	5	5	10
19. Other epidemic diseases.....	3			2	1													
20. Purulent septicemia and infection.....	17	1		3	1	11	8	7	12	13	7	7	11	10	3	3	9	12
21. Glanders and farcy.....																		
22. Malignant pustule and anthrax.....								1						1				
23. Rabies.....										2				1				
24. Actinomycosis, trichinosis, etc.....															1			

TABLE No. 2—Continued.

	0	1	2	3	4	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70
25. Pellegra.....	1					1		2	4	6	11	5	1	5	6	4	2	1
26. Tuberculosis of the larynx.....	62	31	19	6	10	28	66	354	619	511	419	313	233	233	191	161	151	162
27. Tuberculosis of the lungs.....	46	38	21	16	11	21	12	10	11	9	5	5	2	8	1	2	1	
28. Tuberculosis of the meninges.....	15	7	4		3	3	7	17	17	30	21	10	13	16	19	11	14	11
29. Abdominal tuberculosis.....																		
30. Pott's disease.....			1			1	1		3	4	1	1		2	2	1		
31. Cold abscess.....																		
32. White swelling.....	1	2				1		4	1	1		4	2	1	1		1	1
33. Tuberculosis of other organs.....	3	2	3		3		3	3	2	5	4	4	2	3	3	10	4	4
34. General tuberculosis.....	4	5	1	1	1	3	4	10	10	7	6	2	2	2	3	1	6	1
35. Scrofula.....	3	1	1					1				2		1	1			
36. Syphilis.....	33	1						2		6	5	2	5	5		2	1	2
36a. Soft chancre.....																		
37. Gonorrhea (5 years and over).....									1									
38. Gonorrhea (under 5 years).....																		
39. Cancer and other malignant tumors of the buccal cavity.....									1									
40. Cancer and other malignant tumors of the stomach and liver.....						2			1	2	3	11	26	45	51	80	88	102
41. Cancer and other malignant tumors of the peritoneum, intestines and rectum.....											4	7	13	16	12	19	26	20
42. Cancer and other malignant tumors of the female genital organs.....								2	2	2	9	14	27	37	27	29	30	14
43. Cancer and other malignant tumors of the breast.....								1	1	2	1	6	14	21	17	11	14	13
44. Cancer and other malignant tumors of the skin.....							1											
45. Cancer and other malignant tumors of other organs.....						3		5	2		10	4	16	30	32	27	40	10
46. Other tumors.....		1	1			1	1	1	1	2	1	2		3	4	2	4	40
47. Acute articular rheumatism.....						6	8	11	6	6	5	6	5	3	5	9	7	8
48. Chronic rheumatism and gout.....							3	1	1		1		1	1	6	3	11	11
49. Scurvy.....	2																	
50. Diabetes.....		1	1	1		11	11	2	12	9	9	6	10	15	16	23	36	31
51. Exophthalmic goitre.....								2	2	1	1	2	1	3	4	1	3	1
52. Addison's disease.....		1											1	1				1
53. Leukemia.....									2	1	1	5	1	1	1	2	1	3

TABLE No. 2—Continued.

IV. DISEASES OF THE RESPIRATORY SYSTEM.																			
0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65		

TABLE No. 2—Continued.

Deaths from all Causes, by Months, Ages, Color, Nationality and Condition, for the Year Ending December 31, 1907. International Classification.

	70 to 75	75 to 80	80 to 90	90 and over	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
I. GENERAL DISEASES. EPIDEMIC.															
1. Typhoid fever.....	17	10	5	.....	2	902	31	864	58	11	484	383	60	6	933
2. Exanthematous typhus.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3. Recurrent fever.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4. Intermitent and malarial fever.....	6	10	9	1	1	75	6	76	4	1	29	30	18	4	81
5. Variola or smallpox.....	.....	.....	.....	.....	.....	.....	2	8	.....	.....	3	5	.....	.....	8
6. Measles.....	.....	2	1	.....	.....	205	8	207	4	2	186	22	4	1	213
7. Scarletina.....	.....	.....	.....	.....	.....	89	2	89	1	1	91	.....	.....	.....	91
8. Whooping cough.....	.....	.....	.....	.....	.....	128	8	136	.....	.....	136	.....	.....	.....	136
9. Group.....	.....	.....	.....	.....	.....	17	.....	17	.....	.....	17	.....	.....	.....	17
9a. Diphtheria.....	.....	.....	.....	.....	1	327	9	328	3	5	324	12	.....	.....	336
10. Influenza.....	94	89	151	23	1	651	15	551	110	5	100	287	277	2	666
11. Miliary fever.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12. Asiatic cholera.....	.....	.....	.....	.....	.....	18	1	15	4	.....	4	9	6	.....	19
13. Cholera nostras.....	2	5	3	.....	.....	239	3	192	44	6	49	79	110	4	242
14. Dysentery.....	38	43	49	7	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15. Bubonic plague.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16. Yellow fever.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17. Leprosy.....	.....	.....	.....	.....	.....	75	2	71	6	.....	33	25	19	.....	77
18. Erysipelas.....	8	4	3	.....	.....	5	1	5	1	.....	6	.....	.....	.....	6
19. Other epidemic diseases.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20. Purulent septiremia and infection.....	7	12	9	.....	3	159	7	147	17	2	66	69	27	4	166
21. Glanders and farcy.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22. Malignant pustule and anthrax.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....	1	1	.....	.....	2
23. Rabies.....	.....	.....	.....	.....	.....	3	.....	3	.....	.....	.....	.....	.....	.....	3
24. Actinomycosis, trichinosis, etc.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	1

TABLE No. 2—Continued.

	II. LOCAL DISEASES—DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.							Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
	70 75	75 80	80 90	90 over.	Unknown.	White.	Colored.									
60. Encephalitis.....	3	2				55	1	53	1	1	2	44	7	4	1	56
61. Simple meningitis.....	3	1	1	1		368	16	373	3	3	5	317	58	7	2	384
61a. Epidemic cerebro-spinal meningitis.....	4	2	2		3	177	3	177	3	3		139	16	5		180
62. Progressive locomotor ataxia.....	9	2	1			44	1	39	6	6		6	32	7		45
63. Other diseases of the spinal cord.....	15	13	8	2	1	125	2	112	14	14	1	34	60	32	1	127
64. Congestion and hemorrhage of the brain.....	273	194	198	25	6	1,552	47	1,348	233	233	18	187	829	570	13	1,599
65. Softening of the brain.....	19	22	19	1		111	1	95	17	17		13	54	44	1	112
66. Paralysis, cause unspecified.....	102	139	134	14	1	672	19	567	113	113	11	63	317	305	6	691
67. General paralysis.....	16	15	12	1		112	4	91	20	5	5	17	69	28	2	116
68. Other forms of insanity.....	7	1			3	71	4	58	9	9	8	18	34	17	6	75
69. Epilepsy.....	3	5	3		2	131	11	127	8	8	7	99	27	12	4	142
70. Convulsions (non-puerperal, 5 years and over).....	1					8	2	10				3	6	1		10
71. Convulsions (under 5 years).....						212	9	216	1	1	4	221				221
72. Tetanus.....	2					57	2	55	2	2	2	50	8	1		59
73. Chorea.....		5				7		6			1	4	2		1	7
74a. Other diseases of the brain.....	3	3	1			72	1	70	2	2	1	34	33	6		73
74b. Other diseases of the nervous system.....	5	2	6			57	1	56	2	2		6	36	16		58
75. Diseases of the eye and its adnexa.....						1		1	1	1			1			1
76. Diseases of the ear.....	1	1				18		15	3	3		13	4	1		18
III. DISEASES OF THE CIRCULATORY SYSTEM.																
77. Pericarditis.....	3	3	3	2	1	45	3	41	6	6	1	12	25	11		48
78. Acute endocarditis.....	17	14	14	2	1	152	10	118	39	39	5	36	77	47	2	162
79. Organic diseases of the heart.....	412	373	353	24	5	2,639	127	2,305	413	413	48	337	1,430	972	27	2,766
80. Angina pectoris.....	44	35	15		1	250	2	207	43	43	2	22	144	86		252
81. Diseases of the arteries, aneurism, etc.....	50	58	57	6	1	258	6	197	65	65	2	18	136	109	1	264
82. Embolism and thrombosis.....	5	7	3			54	3	49	8	8		9	36	12		57
83. Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....		1	1			10		8	2	2		2	7	1		10
84. Diseases of the lymphatic system (lymphangitis, etc.).....						4		4				3	1			4
85. Hemorrhages.....						39		35	3	3	1	22	13	4		39
86. Other diseases of the circulatory system.....	1	2				1		1						1		1

TABLE No. 2—Continued.

	70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
124. Diseases of the urethra, urinary abscess, etc.						11		6	5		3	6	2		11
125. Diseases of the prostate.	25	17	14	1	1	72	3	61	13	1	5	56	13	1	75
126. Non-venereal diseases of the male genital organs.						1		1					1		1
127. Metritis.			1			4		4			2				4
128. Uterine hemorrhage (non-puerperal).						7		7				7			7
129. Uterine tumor (non-cancerous)		2													
130. Other diseases of the uterus.		1				28	3	27	4		4	21	6		31
131. Cyst and other tumors of the ovary.						31	4	33	2		7	22	6		35
132. Other diseases of the female genital organs.	2		2			23	2	23	2		4	13	7	1	25
133. Non-puerperal diseases of the breast (cancer excepted).						19	1	20			4	12	4		20
						1		1				1			1
VII. PUERPERAL DISEASES.															
134. Accidents of pregnancy					1	40	1	39	2		1	38	2		41
135. Puerperal hemorrhage.						26		23	3			25	1		26
136. Other accidents of labor.						11	1	10				11	1		12
137. Puerperal septicaemia.						190	6	183	11	2	3	182	11		196
138. Puerperal albuminuria and convulsions.						50	5	51	4			54		1	55
139. Plegmasia alba dolens (puerperal).						13	1	13	1			14			14
140. Other puerperal accidents—sudden death.						1		1				1			1
141. Puerperal diseases of the breast.															
VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.															
142. Gangrene.	18	21	31	6	1	113	2	96	16	3	6	43	64	2	115
143. Carbuncle.	1					14		11	3		4	4	1		14
144. Acute abscess, phlegmon.			1			14		14			6	7	1		14
145. Other diseases of the skin and its anexa.	1	2				21		17	4		14	1	6		21
IX. DISEASES OF THE LOCOMOTOR SYSTEM.															
146. Non-tuberculous diseases of the bones.	1	3	1			32	1	30	3		25	6	2		33
147. Arthritis and other diseases of the joints (tuberculosis and rheumatism excepted).		1				2		2			2				2
148. Amputation.						1		1				1			1
149. Other diseases of the organs of locomotion.	1					1		1							1

TABLE No. 2—Continued.

	70 to 75	75 to 80	80 to 90	90 and over	Unknown	White	Colored	American	Foreign	Not Reported	Single	Married	Widowed	Not Reported	Total
<i>C.—Homicides.</i>															
176a. Homicide.....	1	1			4	95	27	99	13	10	52	51	11	8	122
176b. Mob violence.....															
XIV. CAUSES ILL DEFINED.															
177. Dropsy.....	11	8	10	2	2	69	4	63	9	1	11	30	31	1	73
178. Sudden death.....						3		3				3			3
179. Unspecified or ill-defined causes of death.....	15	10	3	1	4	272	6	256	17	5	198	51	18	11	278
XV. STILLBIRTHS.															
180. Stillbirths.....						1,941	78	2,019			2,019				2,019
Grand total.....	2,604	2,464	2,833	402	147	35,001	1,460	32,214	3,734	513	15,446	13,288	7,347	380	36,461

TABLE No. 2A.

Recapitulation of Table No. 2—Classified Deaths by Months, Ages, Color, Nationality and Conjugal Condition, Year 1907.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
I. General diseases.—Epidemic.	810	912	1,082	876	791	712	804	908	803	763	722	725
II. Diseases of the nervous system and organs of sense.	360	350	365	366	338	305	323	344	306	301	276	340
III. Diseases of the circulatory system.	280	277	315	300	318	304	299	275	291	309	299	336
IV. Diseases of the respiratory system.	534	750	601	347	336	200	100	107	121	190	280	365
V. Diseases of the digestive system.	234	207	276	239	219	288	689	819	530	369	235	216
VI. Diseases of the genito-urinary system.	202	195	217	173	191	174	170	167	172	161	192	188
VII. Puerperal diseases.	31	34	41	36	34	27	30	25	19	22	23	23
VIII. Diseases of the skin and cellular tissues.	16	19	15	9	14	12	16	16	11	12	9	15
IX. Diseases of the locomotor system.	4	2	3	1	2	1	3	2	7	3	3	6
X. Malformations.	20	15	17	24	22	28	21	20	28	30	12	29
XI. Diseases of infancy.	152	169	146	145	152	131	137	169	140	141	135	166
XII. Diseases of old age.	109	106	136	74	106	70	70	93	56	86	89	95
XIII. External causes.	184	173	194	179	201	211	270	202	218	233	196	201
XIV. Causes ill-defined.	20	28	22	31	14	14	33	54	36	46	33	23
XV. Stillbirths.	170	176	192	161	176	138	168	175	149	152	167	195
Total.	3,126	3,413	3,022	2,961	2,914	2,615	3,133	3,376	2,887	2,820	2,671	2,923

TABLE No. 2A—Continued.

	0	1	2	3	4	5	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70
I. General diseases.—Epidemic.....	408	256	181	133	87	347	278	621	879	743	654	549	485	567	529	521	565	608
II. Diseases of the nervous system and organs of sense.....	478	130	63	35	21	97	65	58	66	62	84	116	90	174	172	230	300	424
III. Diseases of the circulatory system.....	47	6	6	4	1	21	35	34	55	62	79	117	105	177	209	249	400	482
IV. Diseases of the respiratory system.....	756	244	106	64	39	78	41	73	95	104	101	121	100	114	167	154	218	278
V. Diseases of the digestive system.....	1,458	486	114	45	21	71	80	63	89	76	84	102	121	135	128	164	201	215
VI. Diseases of the genito-urinary system.....	37	11	9	11	9	13	17	24	54	43	64	84	99	117	139	166	203	263
VII. Puerperal diseases.....	15	4	2	2	1	1	1	38	66	73	73	71	17	5	5	5	14	18
VIII. Diseases of the skin and cellular tissues.....	9	3	2	2	1	1	4	1	2	1	3	2	2	4	9	5	1	1
IX. Diseases of the locomotor system. a.....	257	5	1			3							3					
X. Malformations.....																		
XI. Diseases of infancy.....	1,783																	
XII. Diseases of old age.....																		
XIII. External causes.....	173	54	48	26	31	69	78	151	236	189	159	184	139	137	121	129	110	104
XIV. Causes ill-defined.....	159	19	5	3	2	2	2	4	1	4	15	1	8	7	16	6	13	23
XV. Stillbirths.....	2,019																	
Total.....	7,599	1,218	535	323	210	703	601	1,067	1,544	1,360	1,316	1,347	1,169	1,437	1,491	1,626	2,031	2,434

TABLE No. 2A—Continued.

	70 to 75	75 80	80 to 90	90 to and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
I. General diseases.—Epidemic.	545	454	416	47	35	9,418	490	8,919	864	125	3,702	4,445	1,674	87	9,908
II. Diseases of the nervous system and organs of sense.	463	401	355	44	16	3,850	124	3,469	440	65	1,288	1,593	1,056	37	3,974
III. Diseases of the circulatory system.	532	493	446	34	9	3,452	151	2,965	579	59	1,461	1,869	1,243	30	3,603
IV. Diseases of the respiratory system.	330	325	370	44	9	3,738	193	3,396	493	42	1,667	1,324	910	30	3,931
V. Diseases of the digestive system.	220	199	215	25	9	4,184	137	3,942	340	39	2,555	1,143	594	29	4,321
VI. Diseases of the genito-urinary system.	295	266	247	23	8	2,111	91	1,812	356	34	319	1,207	654	22	2,202
VII. Puerperal diseases.					1	331	14	320	23	2	4	325	15	1	345
VIII. Diseases of the skin and cellular tissues.	20	23	32	6	1	162	2	138	23	3	30	57	75	2	164
IX. Diseases of the locomotor system.	2	4	1			36	1	34	3		27	8	2		37
X. Malformations.						263	3	266			266				266
XI. Diseases of infancy.						1,735	48	1,783			1,783				1,783
XII. Diseases of old age.	99	213	596	153	2	1,068	22	813	253	24	63	258	752	17	1,090
XIII. External causes.	72	68	112	23	51	2,368	96	2,016	334	114	1,053	975	323	113	2,464
XIV. Causes ill-defined.	26	18	13	3	6	344	10	322	26	6	209	84	49	12	354
XV. Stillbirths.						1,941	78	2,019			2,019				2,019
Total.	2,604	2,464	2,833	402	147	35,001	1,460	32,214	3,734	513	15,446	13,288	7,347	380	36,461

TABLE No. 3.

Deaths in Indiana by Months, Counties, Ages, Sex, Color, Nationality and Conjugal Condition, 1907.

COUNTIES.	SEX.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Adams.....	Total.....	20	23	28	24	17	12	16	22	15	14	20	19
	Male.....	7	11	8	10	7	9	9	12	10	7	13	9
	Female.....	13	12	20	14	10	3	7	10	5	7	7	10
Allen.....	Total.....	96	113	106	77	89	88	84	96	97	100	75	107
	Male.....	50	57	52	41	49	51	52	51	55	58	47	50
	Female.....	46	56	54	36	40	37	32	45	42	42	28	57
Bartholomew.....	Total.....	27	42	37	31	33	27	35	39	22	23	23	25
	Male.....	14	19	18	16	13	14	14	22	16	13	10	12
	Female.....	13	23	19	15	20	13	21	17	6	10	13	13
Benton.....	Total.....	23	11	19	11	12	12	17	10	7	6	11	8
	Male.....	14	7	11	5	4	4	12	3	4	4	6	6
	Female.....	9	4	8	6	5	8	5	7	3	2	5	2
Blackford.....	Total.....	14	20	20	19	16	14	20	24	23	20	13	17
	Male.....	7	12	10	11	10	7	13	10	12	9	7	11
	Female.....	7	8	10	8	6	7	7	14	11	11	6	6
Boone.....	Total.....	30	32	35	27	41	16	35	34	28	16	13	22
	Male.....	18	18	15	17	22	3	20	17	16	5	7	10
	Female.....	12	14	20	10	19	13	15	17	12	11	6	12
Brown.....	Total.....	10	18	11	14	7	11	9	14	14	10	8	11
	Male.....	2	9	5	6	4	6	5	9	6	4	6	6
	Female.....	8	9	6	8	3	5	4	5	8	6	2	5
Carroll.....	Total.....	28	20	24	18	20	8	9	15	18	22	17	21
	Male.....	13	7	11	14	10	4	3	10	9	13	9	11
	Female.....	15	13	13	4	10	4	6	5	9	9	8	10

Cass.....	Total.....	49	49	42	51	40	35	27	45	40	25	45	48
	Male.....	31	27	24	27	21	21	14	16	27	15	19	26
	Female.....	18	22	18	24	19	14	13	16	13	10	26	22
Clark.....	Total.....	36	45	37	37	26	35	53	42	50	23	39	43
	Male.....	17	23	16	20	17	21	22	26	26	11	24	29
	Female.....	19	22	21	17	9	14	31	16	24	12	15	14
Clay.....	Total.....	47	34	40	31	34	31	37	43	44	32	27	35
	Male.....	26	18	22	17	21	21	27	16	22	20	18	19
	Female.....	21	16	18	14	13	10	10	27	22	12	9	16
Cinton.....	Total.....	38	40	37	33	33	34	25	19	29	32	24	35
	Male.....	16	17	14	18	21	25	11	9	16	19	12	17
	Female.....	22	23	23	15	12	9	14	10	13	13	12	18
Crawford.....	Total.....	11	23	25	17	17	15	15	11	7	11	7	11
	Male.....	5	10	14	8	8	4	6	7	3	6	4	5
	Female.....	6	13	11	9	9	11	9	4	4	5	3	6
Davies.....	Total.....	37	34	27	25	33	16	31	29	36	33	29	28
	Male.....	19	19	16	16	19	8	14	15	15	17	15	16
	Female.....	18	15	11	9	14	8	17	14	21	16	14	12
Dearborn.....	Total.....	26	24	28	30	24	19	31	19	16	30	32	37
	Male.....	14	6	14	15	9	13	14	10	7	15	17	20
	Female.....	12	18	14	15	15	6	17	9	9	15	15	17
Decatur.....	Total.....	27	30	24	17	19	19	20	36	25	25	21	24
	Male.....	15	11	13	11	9	8	10	19	18	12	11	9
	Female.....	12	19	11	6	10	11	10	17	7	13	10	15
Dekalb.....	Total.....	33	31	40	24	28	19	18	31	19	21	20	26
	Male.....	14	18	19	13	16	12	12	10	14	12	10	14
	Female.....	19	13	21	11	12	7	6	21	5	9	10	12
Delaware.....	Total.....	61	57	63	59	56	52	69	78	51	51	42	36
	Male.....	23	30	32	32	33	24	44	34	26	22	24	19
	Female.....	28	27	31	27	23	28	25	44	25	29	18	17
Dubois.....	Total.....	17	17	22	21	22	16	24	20	19	29	20	17
	Male.....	11	10	14	10	9	8	14	11	16	16	12	10
	Female.....	6	7	8	11	13	8	10	9	3	13	8	7
Elkhart.....	Total.....	61	53	84	46	65	49	43	53	52	55	47	45
	Male.....	25	26	40	16	33	29	23	24	28	32	23	19
	Female.....	36	27	44	30	32	20	20	29	24	23	24	26

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Fayette.	Total.....	17	23	9	17	11	13	15	17	16	18	11	12
	Male.....	8	7	4	6	7	9	9	8	10	11	8	7
	Female.....	9	16	5	11	4	4	6	9	6	7	3	5
Floyd.	Total.....	38	48	40	51	40	43	36	33	25	25	42	33
	Male.....	19	25	19	24	21	24	21	18	12	13	16	16
	Female.....	19	23	21	27	22	20	15	15	13	12	26	17
Fountain.	Total.....	25	29	33	21	15	15	18	30	29	22	20	27
	Male.....	13	14	17	16	6	10	7	17	13	10	11	11
	Female.....	12	15	16	5	9	5	11	13	16	12	9	12
Franklin.	Total.....	26	16	19	14	20	12	16	19	14	24	18	14
	Male.....	15	12	15	8	8	7	11	10	8	12	11	15
	Female.....	11	4	4	6	12	5	5	9	6	12	7	9
Fulton.	Total.....	13	21	26	12	16	15	10	23	15	17	14	18
	Male.....	5	11	12	6	4	5	4	8	8	10	9	13
	Female.....	8	10	14	6	8	10	6	10	7	7	5	5
Gibson.	Total.....	26	45	40	32	22	38	44	34	30	28	25	20
	Male.....	11	25	19	21	16	21	18	13	13	14	13	10
	Female.....	15	20	21	11	6	17	26	15	17	14	12	10
Grant.	Total.....	67	72	105	76	78	54	65	80	64	62	62	55
	Male.....	36	37	69	50	47	34	39	49	42	41	32	35
	Female.....	31	35	36	26	31	20	26	31	22	21	30	20
Greene.	Total.....	34	48	44	31	51	27	47	35	40	31	46	36
	Male.....	19	21	19	19	23	14	27	16	22	11	26	19
	Female.....	15	27	25	12	28	13	20	19	18	20	20	17
Hamilton.	Total.....	26	36	54	32	18	18	29	41	22	27	29	25
	Male.....	12	15	32	16	13	7	16	24	10	16	15	13
	Female.....	14	21	22	16	5	11	13	17	12	11	14	12

Hancock.....	Total.....	15	38	40	22	16	23	26	33	34	23	19	24
	Male.....	7	20	20	12	9	9	16	15	8	11	11	11
	Female.....	8	18	20	10	7	14	10	18	26	12	8	13
Harrison.....	Total.....	15	20	31	17	16	31	28	15	25	25	20	19
	Male.....	4	9	16	10	5	19	19	8	11	8	8	10
	Female.....	11	11	15	7	11	12	9	7	14	17	12	9
Hendricks.....	Total.....	26	27	37	25	24	27	20	25	25	24	22	21
	Male.....	13	16	14	13	12	15	8	14	17	19	10	12
	Female.....	13	11	23	12	12	12	12	11	8	5	12	9
Henry.....	Total.....	30	40	37	31	21	24	47	35	33	24	17	33
	Male.....	13	21	16	10	13	12	22	17	16	9	9	14
	Female.....	17	19	21	21	8	12	25	18	16	8	8	19
Howard.....	Total.....	27	49	33	40	37	31	28	33	41	26	38	26
	Male.....	16	23	15	17	17	19	14	17	18	19	18	19
	Female.....	11	26	18	21	20	14	14	16	24	8	20	11
Huntington.....	Total.....	36	27	32	31	27	27	31	22	31	33	28	31
	Male.....	20	10	15	18	15	16	18	11	14	14	17	21
	Female.....	16	17	17	13	12	11	13	11	17	19	11	10
Jackson.....	Total.....	33	26	36	41	23	34	40	30	23	34	25	34
	Male.....	17	12	18	17	11	22	23	15	11	14	13	16
	Female.....	16	14	18	24	12	12	17	15	12	20	12	18
Jasper.....	Total.....	15	21	16	24	20	11	6	11	11	14	9	13
	Male.....	7	15	10	13	11	5	3	7	6	6	7	7
	Female.....	8	6	6	11	9	6	3	4	5	8	2	6
Jay.....	Total.....	35	12	37	29	28	15	33	49	30	27	22	25
	Male.....	20	6	18	13	17	9	19	24	19	12	12	12
	Female.....	15	6	19	16	11	6	14	25	18	15	9	13
Jefferson.....	Total.....	26	34	35	30	22	18	34	37	33	28	21	27
	Male.....	14	14	20	19	13	12	19	13	21	15	14	9
	Female.....	12	20	15	17	10	6	15	24	12	13	7	18
Jenn ngs.....	Total.....	13	21	23	12	22	16	19	19	20	16	8	12
	Male.....	6	9	8	8	11	9	8	6	12	6	1	9
	Female.....	7	12	15	4	11	7	11	13	8	10	7	3
Johnson.....	Total.....	22	27	26	26	23	20	32	30	31	24	24	17
	Male.....	16	14	15	15	13	15	18	18	21	11	9	9
	Female.....	6	13	11	18	10	5	14	12	10	16	13	8

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Knox.....	Total.....	45	48	61	31	31	34	39	40	36	39	40	46
	Male.....	27	27	33	15	13	19	25	21	19	22	22	21
	Female.....	18	21	28	16	18	15	14	19	17	17	18	25
Kosciusko.....	Total.....	33	36	40	29	14	19	22	32	23	33	15	37
	Male.....	16	21	20	15	5	8	11	13	13	20	6	22
	Female.....	17	15	20	14	9	11	10	19	10	13	9	15
Lagrange.....	Total.....	16	17	13	23	15	11	12	13	20	10	13	15
	Male.....	6	7	7	9	7	5	10	6	13	6	9	9
	Female.....	10	10	6	14	8	6	2	7	7	4	4	6
Lake.....	Total.....	54	68	72	68	72	81	78	136	78	75	77	94
	Male.....	36	39	40	38	56	57	51	75	45	50	51	59
	Female.....	18	29	32	30	16	24	27	61	33	25	26	35
Laporte.....	Total.....	65	54	52	55	62	43	46	57	46	51	53	49
	Male.....	31	20	28	33	32	21	32	29	27	34	20	27
	Female.....	34	34	24	22	30	22	14	28	19	17	33	22
Lawrence.....	Total.....	33	49	36	31	37	27	60	42	32	33	29	27
	Male.....	15	25	18	17	15	18	42	23	17	15	14	11
	Female.....	18	24	18	14	22	9	18	19	15	18	15	16
Madison.....	Total.....	75	93	99	58	63	55	72	81	63	66	58	74
	Male.....	45	53	44	34	30	27	35	45	35	39	22	40
	Female.....	30	40	55	24	33	28	37	36	28	27	36	34
Marion.....	Total.....	343	334	363	323	325	298	403	373	282	304	334	331
	Male.....	170	167	181	175	173	170	204	207	156	169	187	193
	Female.....	173	167	182	148	152	128	199	166	126	135	147	138
Marshall.....	Total.....	18	32	39	23	24	25	27	22	18	22	19	28
	Male.....	6	18	21	10	13	15	15	9	8	13	10	13
	Female.....	12	14	18	13	11	10	12	13	10	9	9	15

Martin.....	Total.....	9	11	15	16	12	12	19	16	18	12	15	18
	Male.....	5	4	6	8	3	8	12	7	7	7	9	10
	Female.....	4	7	9	8	9	4	7	9	6	5	6	8
Miami.....	Total.....	46	35	40	23	32	31	27	31	25	22	30	24
	Male.....	29	19	20	12	18	20	12	16	13	10	9	15
	Female.....	17	16	20	11	14	11	15	15	12	12	21	9
Monroe.....	Total.....	27	34	22	20	21	21	30	27	19	16	27	27
	Male.....	13	20	14	7	8	9	19	18	15	8	13	12
	Female.....	14	14	8	13	13	12	11	9	4	8	14	15
Montgomery.....	Total.....	35	45	43	30	38	31	32	38	27	36	23	30
	Male.....	19	18	27	12	22	23	18	20	13	13	14	13
	Female.....	16	27	16	18	16	8	14	18	14	22	10	14
Morgan.....	Total.....	30	31	29	13	19	23	30	33	16	19	21	23
	Male.....	16	16	19	7	8	13	11	21	10	10	9	13
	Female.....	14	15	10	6	11	10	19	12	6	9	12	10
Newton.....	Total.....	5	16	10	9	8	5	6	7	7	5	8	12
	Male.....	2	8	4	5	7	1	1	3	1	3	5	7
	Female.....	3	8	6	4	1	4	5	4	6	2	3	5
Noble.....	Total.....	37	36	28	28	24	29	20	28	17	25	11	19
	Male.....	21	18	12	10	12	15	10	19	8	11	6	7
	Female.....	16	18	16	18	12	14	10	9	9	14	5	12
Ohio.....	Total.....	13	11	7	8	4	5	11	4	3	5	2	8
	Male.....	10	3	3	4	1	2	6	1	2	4	2	5
	Female.....	3	8	4	4	3	3	5	3	1	1	.....	3
Orange.....	Total.....	19	16	27	17	16	22	19	20	15	20	11	18
	Male.....	9	7	13	9	11	15	10	13	8	13	8	8
	Female.....	10	9	14	8	5	7	9	7	7	7	3	10
Owen.....	Total.....	14	13	19	17	12	10	15	21	23	15	10	9
	Male.....	6	6	9	9	7	8	12	11	6	6	5	4
	Female.....	8	7	10	8	5	2	3	13	12	9	5	5
Parke.....	Total.....	26	32	27	21	24	21	16	28	27	34	21	31
	Male.....	16	13	14	11	14	13	11	19	13	20	10	19
	Female.....	10	19	13	10	8	8	5	9	14	14	11	12
Perry.....	Total.....	15	24	25	10	18	16	13	18	10	14	11	22
	Male.....	8	11	16	6	10	7	8	8	3	5	5	13
	Female.....	7	13	9	4	8	9	8	10	7	6	6	9

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Pisc.	Total.....	22	22	19	28	24	16	41	24	15	21	25	14
	Male.....	10	12	8	11	9	9	17	6	5	8	12	6
	Female.....	12	10	11	17	17	7	24	18	10	13	13	8
Porter	Total.....	20	24	23	16	14	17	18	15	24	22	22	24
	Male.....	12	12	10	8	8	9	10	6	13	13	13	15
	Female.....	8	12	13	8	6	8	8	9	11	14	9	9
Posey	Total.....	18	32	41	25	32	17	32	32	15	16	23	23
	Male.....	8	19	26	10	19	11	16	15	10	12	16	14
	Female.....	10	13	15	15	13	6	16	17	5	4	7	9
Pulaski	Total.....	21	19	17	17	11	9	8	12	8	15	17	9
	Male.....	10	11	7	7	3	5	3	4	5	11	8	2
	Female.....	11	8	10	10	8	4	5	8	3	4	9	7
Putnam	Total.....	24	35	26	23	30	18	28	32	38	27	24	23
	Male.....	15	14	10	13	20	12	14	17	23	14	13	9
	Female.....	9	21	16	10	10	6	14	15	15	13	11	14
Randolph	Total.....	27	37	33	31	24	21	30	31	25	26	24	22
	Male.....	11	20	14	13	15	8	13	16	9	16	15	10
	Female.....	16	17	19	18	9	13	17	15	16	10	9	12
Ripley	Total.....	13	27	34	27	17	20	23	9	17	12	21	21
	Male.....	9	16	20	16	9	8	12	7	6	5	14	13
	Female.....	4	11	14	11	8	12	11	2	11	7	7	8
Rush	Total.....	22	33	24	24	15	15	23	24	21	18	20	15
	Male.....	8	14	16	9	3	7	11	12	7	9	15	8
	Female.....	14	19	8	15	12	8	12	12	14	9	5	7
Scott	Total.....	14	12	6	8	5	5	10	7	16	7	5	8
	Male.....	4	6	4	5	5	5	5	4	7	4	2	2
	Female.....	10	6	2	3	1	2	5	3	9	3	3	6

Shelby.....	32	33	42	37	36	35	23	31	33	29	24	30
Male.....	16	13	14	22	15	16	13	15	16	14	10	17
Female.....	16	20	28	15	21	19	10	16	17	15	14	13
Spencer.....	17	20	18	23	16	12	20	18	16	12	19	23
Male.....	11	11	8	10	7	5	15	7	5	6	12	12
Female.....	6	9	10	13	9	7	5	11	11	6	7	11
Starke.....	11	14	13	11	16	10	12	9	11	9	9	10
Male.....	8	8	7	3	8	7	7	4	3	3	3	5
Female.....	3	6	6	8	8	3	5	5	6	6	6	5
Steuben.....	19	16	18	12	21	11	17	13	14	18	18	9
Male.....	7	8	9	7	9	5	9	8	10	14	12	4
Female.....	12	8	9	5	12	6	8	5	4	4	6	5
St. Joseph.....	99	110	87	82	74	103	69	120	86	66	102	99
Male.....	56	56	47	49	31	56	33	58	42	33	58	54
Female.....	43	54	40	33	43	47	36	62	44	33	44	45
Sullivan.....	38	37	46	33	38	14	28	52	36	42	27	27
Male.....	19	16	23	15	20	9	18	24	19	25	15	15
Female.....	19	21	23	18	18	5	10	28	17	17	12	12
Switzerland.....	11	9	17	8	12	15	16	16	14	13	10	15
Male.....	8	5	12	5	10	4	9	8	9	8	4	8
Female.....	3	4	5	3	2	11	7	8	5	5	6	7
Tipecanoe.....	44	56	52	59	56	38	40	37	44	47	33	49
Male.....	14	29	32	31	30	19	26	20	28	19	18	25
Female.....	30	27	20	28	26	19	14	17	16	28	15	24
Tipton.....	23	13	28	17	27	16	19	18	20	22	20	20
Male.....	9	7	12	8	15	9	12	9	11	8	11	7
Female.....	14	6	16	9	12	7	7	9	9	14	9	13
Union.....	7	5	7	7	6	7	3	9	14	8	1	10
Male.....	4	2	4	3	3	5	2	2	12	4	4	4
Female.....	3	3	3	4	3	2	1	7	2	4	1	6
Vanderburgh.....	106	104	126	93	86	101	120	94	81	88	85	92
Male.....	59	53	65	42	44	60	61	49	37	49	41	51
Female.....	47	51	61	51	42	41	59	45	44	39	44	41
Vermillion.....	33	14	27	25	22	21	26	28	30	15	14	16
Male.....	20	8	14	14	13	11	11	11	9	6	10	10
Female.....	13	6	13	11	9	10	12	18	15	6	8	6

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan. *	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Vigo.....	Total.....	106	107	108	92	105	76	104	130	99	132	93	87
	Male.....	65	62	64	53	58	40	50	69	59	82	46	58
	Female.....	41	45	44	39	47	36	54	61	40	50	47	29
Wabash.....	Total.....	27	33	36	20	32	22	27	32	34	21	25	25
	Male.....	14	15	20	10	17	13	13	18	18	12	14	16
	Female.....	13	18	16	10	15	9	14	14	16	9	11	9
Warren.....	Total.....	12	13	8	11	13	13	6	14	6	10	12	14
	Male.....	7	6	4	4	6	4	4	8	2	5	5	7
	Female.....	5	7	4	7	7	9	2	6	4	5	7	7
Warrick.....	Total.....	24	16	36	23	16	23	29	25	24	22	20	27
	Male.....	14	9	19	9	12	11	17	16	16	13	13	15
	Female.....	10	7	17	14	4	12	12	9	9	9	7	12
Washington.....	Total.....	14	29	18	13	24	12	14	14	20	17	15	27
	Male.....	8	11	7	11	8	5	10	9	10	11	9	9
	Female.....	6	18	11	2	16	7	4	5	10	6	6	18
Wayne.....	Total.....	54	59	70	57	44	41	58	65	68	42	41	52
	Male.....	27	30	41	32	22	22	38	37	34	22	17	21
	Female.....	27	29	29	25	22	19	28	28	34	20	24	31
Wells.....	Total.....	25	22	33	30	23	17	22	35	26	28	14	18
	Male.....	15	13	19	14	11	11	11	11	13	10	9	6
	Female.....	10	9	14	16	12	6	11	16	13	18	5	12
White.....	Total.....	16	11	21	10	10	13	16	11	13	12	12	19
	Male.....	7	5	10	6	4	4	9	9	9	5	8	9
	Females.....	9	6	11	4	6	9	7	6	4	7	4	10

Whitley.....	13	20	19	20	12	18	12	21	10	17	14	16
Male.....	4	15	11	12	8	11	5	7	7	10	8	8
Female.....	9	5	8	8	4	7	7	14	3	7	6	8
Total.....												
Total males.....	1,627	1,717	1,865	1,541	1,535	1,446	1,700	1,753	1,549	1,526	1,432	1,560
Total females.....	1,499	1,696	1,757	1,420	1,379	1,169	1,433	1,623	1,338	1,294	1,239	1,363
Grand total. *	3,126	3,413	3,622	2,961	2,914	2,615	3,133	3,376	2,887	2,820	2,671	2,923

TABLE No. 3—Continued.

Deaths in Indiana by Months, Counties, Ages, Sex, Color, Nationality and Conjugal Condition, 1907.

COUNTIES.	SEX.	0	1	2	3	4	5	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70
Adams.....	Total.....	56	4	1	1	1	1	3	7	8	8	7	7	8	9	10	10	11	
	Male.....	28	2	1	1	1	1	2	5	4	4	3	4	2	5	7	6	6	
	Female.....	28	2	.....	.....	.....	.....	1	10	3	5	6	3	6	2	2	8	4	5
Allen.....	Total.....	199	27	15	6	5	25	25	35	52	48	44	46	46	48	42	54	64	83
	Male.....	120	15	9	1	5	10	16	21	28	19	23	23	20	27	24	31	40	48
	Female.....	79	12	6	5	.....	15	9	14	24	29	21	23	26	21	18	23	24	35
Bartholomew.....	Total.....	79	7	4	4	1	7	3	11	13	14	12	9	13	9	16	23	20	38
	Male.....	40	4	3	2	.....	1	2	5	4	6	5	4	8	5	8	11	10	20
	Female.....	39	3	1	2	1	6	1	6	9	8	7	5	5	4	8	12	10	18
Benton.....	Total.....	36	8	3	6	.....	.....	4	1	4	4	6	6	3	4	7	8	5	9
	Male.....	21	4	.....	.....	.....	.....	1	.....	3	3	3	4	3	2	5	5	5	5
	Female.....	15	4	3	3	.....	.....	3	1	1	2	3	2	.....	2	2	3	3	4
Blackford.....	Total.....	55	7	5	5	1	.....	6	6	6	6	10	4	10	8	8	9	13	16
	Male.....	30	2	3	3	1	.....	5	3	4	4	6	1	4	3	6	6	5	11
	Female.....	25	5	2	2	.....	.....	1	3	6	2	4	3	6	5	2	3	8	5
Boone.....	Total.....	72	9	3	3	2	9	5	6	12	8	9	8	8	8	10	16	22	22
	Male.....	42	6	1	2	1	5	2	2	3	7	5	4	2	2	4	9	13	12
	Female.....	30	3	2	1	1	4	5	4	9	1	4	4	6	6	6	7	9	10
Brown.....	Total.....	33	4	1	2	2	2	7	3	7	2	3	2	2	1	3	4	8	18
	Male.....	19	2	1	.....	.....	.....	3	1	3	1	1	1	3	1	1	2	5	9
	Female.....	14	2	.....	2	.....	.....	3	4	4	1	2	1	1	.....	2	2	3	9
Carroll.....	Total.....	46	5	3	1	.....	2	3	8	6	5	3	6	6	11	9	6	16	13
	Male.....	27	4	3	1	.....	1	1	2	1	1	3	3	4	7	3	1	7	11
	Female.....	19	1	.....	.....	.....	1	2	6	5	2	.....	3	2	4	6	9	9	2

Cass.....	83	10	12	4	4	9	5	11	28	16	17	17	20	16	32	37	28	23
Male.....	50	6	15	3	2	4	4	9	16	5	10	9	15	7	16	21	18	12
Female.....	33	4	7	1	2	5	1	2	12	11	7	8	5	9	16	16	10	11
Clark.....																		
Male.....	92	19	6	7	4	8	5	19	22	28	17	19	16	19	17	23	24	29
Female.....	56	6	6	5	1	4	3	8	8	23	11	11	6	14	12	15	15	17
Clay.....	36	13	6	2	3	4	2	11	14	5	6	8	6	10	7	11	9	12
Male.....	90	28	15	3	3	14	7	6	20	12	10	19	8	23	16	21	21	29
Female.....	53	13	9	2	1	11	4	3	6	4	4	10	2	12	13	14	15	23
Clinton.....	37	15	6	1	2	3	3	3	14	8	6	9	6	10	4	7	6	6
Male.....	66	14	5	4	.....	3	10	10	23	10	14	17	6	18	14	17	23	30
Female.....	37	9	2	2	.....	2	3	5	11	5	7	11	2	9	6	9	9	18
Crawford.....	29	5	3	2	.....	1	7	5	12	5	7	6	4	9	8	8	14	12
Male.....	18	5	4	2	2	5	1	8	11	10	6	6	5	5	7	6	12	19
Female.....	7	4	2	2	1	4	.....	2	6	2	2	3	1	3	3	2	7	12
Davies.....	11	1	2	.....	1	1	1	6	5	8	4	3	4	2	4	4	5	7
Male.....	100	20	7	4	.....	8	7	12	19	17	10	16	9	7	7	11	19	27
Female.....	57	11	4	3	.....	3	7	7	10	3	1	6	3	5	5	7	8	17
Dearborn.....	43	9	3	1	.....	5	.....	5	9	14	9	10	6	2	2	4	11	10
Male.....	54	9	6	3	.....	11	7	12	11	9	7	5	9	8	12	14	14	16
Female.....	20	3	2	1	.....	5	4	5	7	4	2	3	5	3	6	7	7	8
Decatur.....	34	6	4	2	.....	6	3	7	4	5	5	2	4	5	6	7	7	8
Male.....	64	8	2	3	1	6	3	3	4	2	8	11	7	4	12	12	21	23
Female.....	25	6	2	3	1	1	2	.....	2	1	2	5	4	4	4	7	9	15
Dekalb.....	39	2	2	.....	5	5	1	3	2	2	1	6	3	3	8	5	12	8
Male.....	41	8	5	1	1	5	5	7	13	8	14	6	6	17	15	10	18	24
Female.....	23	5	2	.....	3	3	1	3	6	6	7	4	3	7	7	5	6	15
Delaware.....	18	3	3	1	1	2	4	4	7	2	7	2	3	10	8	12	12	9
Male.....	172	41	17	9	3	13	16	24	30	34	27	27	15	23	30	22	36	26
Female.....	101	23	11	5	1	6	7	10	15	18	15	10	7	11	15	12	16	19
Dubois.....	71	18	6	4	2	7	9	14	15	16	12	17	8	12	15	10	20	7
Male.....	53	14	3	2	4	2	3	3	15	4	12	9	9	9	6	7	10	14
Female.....	32	8	.....	1	2	2	1	2	4	3	7	5	7	6	2	6	6	4
Elkhart.....	21	6	3	1	1	.....	2	1	11	1	5	4	2	3	4	1	4	10
Male.....	116	4	7	1	4	13	11	13	26	25	26	20	13	32	22	35	35	49
Female.....	63	5	1	1	2	6	4	6	8	12	12	5	6	14	9	19	19	22
	53	8	6	3	2	7	7	7	18	13	14	15	7	18	13	16	16	27

Hancock.....	68	11	5	2	2	8	5	8	10	12	11	8	14	7	6	10	26	22
Male.....	36	6	3	2	2	5	3	3	4	8	5	2	8	1	2	3	9	13
Female.....	32	5	2	2	2	3	2	5	6	4	6	6	6	6	4	7	17	9
Harrison.....	60	11	6	3	1	3	10	6	11	5	7	4	6	4	7	16	16	12
Male.....	37	9	3	1	1	1	3	3	2	3	1	2	2	2	3	4	8	6
Female.....	23	2	3	2	1	2	7	4	9	2	6	2	4	2	4	12	8	6
Hendricks.....	52	3	2	1	2	5	10	9	10	10	6	8	5	10	14	18	21	22
Male.....	28	3	2	1	1	2	7	3	5	4	4	5	2	5	9	11	12	10
Female.....	24	3	2	1	1	3	3	6	5	6	2	3	3	5	5	7	9	12
Henry.....	82	14	4	4	1	3	5	14	15	17	15	4	8	9	26	16	26	19
Male.....	45	6	2	3	1	1	3	8	4	12	8	2	3	2	16	5	12	9
Female.....	37	8	2	1	1	2	2	6	11	5	7	4	6	6	10	11	14	10
Howard.....	115	5	5	4	5	12	8	17	10	17	11	11	8	14	7	22	21	23
Male.....	57	3	3	3	3	5	5	7	5	4	4	6	3	10	3	13	13	12
Female.....	58	2	1	1	2	7	3	10	5	13	7	5	5	4	4	9	8	11
Huntington.....	70	5	6	5	3	4	4	10	12	9	8	12	5	16	15	17	20	23
Male.....	38	3	2	2	2	3	2	2	4	6	5	7	3	8	9	9	8	14
Female.....	32	2	4	3	1	1	2	8	8	3	3	5	2	8	6	8	12	9
Jackson.....	88	21	5	6	3	9	8	15	15	15	16	9	5	13	8	17	19	28
Male.....	40	7	2	2	3	3	5	7	8	7	10	3	3	9	3	12	11	11
Female.....	48	14	3	4	1	6	3	8	7	8	6	6	2	4	5	5	8	11
Jasper.....	44	9	3	3	3	6	6	3	5	7	2	2	5	8	5	9	8	8
Male.....	29	2	2	2	2	3	6	3	1	5	1	1	3	3	2	7	5	4
Female.....	15	9	1	1	1	3	6	3	4	2	1	1	2	5	3	2	3	4
Jay.....	72	19	2	3	4	7	8	14	16	9	8	19	10	7	11	17	15	28
Male.....	38	16	1	1	2	5	4	8	7	2	5	4	8	1	7	12	8	12
Female.....	38	3	2	2	2	2	4	6	9	7	3	15	2	6	4	5	7	16
Jefferson.....	45	11	5	3	2	5	5	5	15	13	7	8	16	19	19	17	25	24
Male.....	29	4	3	1	1	2	2	2	12	1	3	5	5	8	12	11	10	14
Female.....	16	7	2	2	1	3	3	3	3	12	4	3	11	11	7	6	15	10
Jennings.....	40	8	2	5	1	1	3	3	13	4	7	10	10	10	5	10	9	12
Male.....	16	3	2	1	1	1	3	3	9	1	2	6	4	2	4	8	3	7
Female.....	24	5	1	4	1	1	3	3	4	3	5	4	6	8	1	2	6	5
Johnson.....	40	6	2	1	4	2	5	8	13	11	12	14	11	18	14	6	18	28
Male.....	22	2	2	2	2	2	3	7	8	5	6	9	4	12	9	4	8	14
Female.....	18	1	1	1	2	2	2	1	5	6	6	5	7	6	5	2	10	14

Martin.....	Total.....	40	7	1	2	1	5	2	5	9	3	7	5	6	4	13	8
	Male.....	24	5	1	1	1	2	2	3	3	3	2	2	3	3	12	1
	Female.....	16	2	1	1	...	...	...	...	6	...	5	3	3	3	1	7
Miami.....	Total.....	62	10	2	3	2	3	5	12	18	17	11	8	14	19	35	19
	Male.....	42	6	...	3	...	1	4	6	2	7	3	5	9	10	15	11
	Female.....	20	4	2	...	2	2	1	6	16	10	8	3	5	9	20	8
Monroe.....	Total.....	58	8	9	6	1	11	8	11	16	21	2	12	6	7	21	15
	Male.....	36	3	7	4	...	3	5	5	6	11	1	7	4	4	17	11
	Female.....	22	5	2	2	1	8	3	6	10	10	1	5	2	3	4	4
Montgomery.....	Total.....	67	9	3	1	1	11	4	9	15	20	13	15	7	9	25	28
	Male.....	41	2	2	1	...	4	2	2	3	8	6	2	6	6	14	18
	Female.....	26	7	1	...	1	7	2	3	12	12	7	13	1	3	11	10
Morgan.....	Total.....	63	11	2	2	1	6	2	9	12	5	10	8	6	6	22	23
	Male.....	39	7	1	...	...	4	1	3	5	2	5	3	2	4	10	9
	Female.....	24	4	1	2	1	2	1	6	7	3	5	5	2	2	11	14
Newton.....	Total.....	16	...	3	2	...	4	...	3	3	3	1	4	4	5	13	7
	Male.....	11	...	1	...	...	3	...	1	2	1	...	3	2	2	4	5
	Female.....	5	...	2	2	...	1	...	2	1	2	1	1	2	3	9	2
Noble.....	Total.....	56	6	2	...	...	5	2	5	10	9	8	4	4	9	12	25
	Male.....	29	3	...	...	...	1	...	2	6	3	5	2	1	4	6	9
	Female.....	27	3	2	...	...	4	2	3	4	6	3	2	3	5	6	15
Ohio.....	Total.....	6	2	2	...	...	1	3	2	4	1	...	...	3	3	8	9
	Male.....	4	2	2	...	2	1	3	2	4	1	...	...	1	1	1	2
	Female.....	2	...	...	...	...	1	2	1	...	...	...	...	2	2	7	7
Orange.....	Total.....	38	8	5	1	1	3	3	11	13	8	9	21	7	9	4	16
	Male.....	27	6	2	...	...	3	3	6	9	4	4	4	6	5	2	8
	Female.....	11	2	3	1	1	...	...	5	4	4	5	14	1	4	5	8
Owen.....	Total.....	32	6	1	...	...	2	2	7	9	4	6	3	4	10	5	14
	Male.....	15	4	1	...	1	2	1	4	3	2	1	1	1	4	4	10
	Female.....	17	2	...	...	...	...	1	3	6	2	5	2	3	6	1	4
Parke.....	Total.....	72	9	5	1	2	11	4	13	12	12	5	8	11	11	16	23
	Male.....	43	4	2	1	2	6	1	8	1	8	2	3	4	5	7	16
	Female.....	29	5	...	...	...	5	3	5	11	4	3	5	7	6	11	7
Perry.....	Total.....	33	8	1	6	...	6	7	6	13	7	3	16	3	6	9	15
	Male.....	18	4	1	...	...	4	4	2	4	3	1	7	1	3	6	5
	Female.....	15	...	...	4	...	2	3	4	9	4	2	9	2	3	3	10

TABLE No. 3—Continued.

COUNTIES.	Sex.	0	1	2	3	4	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70
Pike.....	Total.....	65	13	8	.....	5	8	4	10	13	12	10	9	8	11	12	15	10	11
	Male.....	33	4	3	.....	3	3	1	3	7	6	2	3	2	2	3	3	8	5
	Female.....	32	9	5	.....	2	5	3	7	6	6	8	6	6	9	9	12	2	6
Porter.....	Total.....	42	4	3	2	1	3	6	6	7	3	11	6	15	6	8	10	15	15
	Male.....	24	2	2	2	.....	1	2	2	7	2	5	4	5	4	6	4	8	8
	Female.....	18	2	3	.....	1	2	4	4	.....	2	6	2	10	2	2	6	7	7
Posey.....	Total.....	55	15	4	7	2	.....	6	10	19	9	11	15	11	16	16	11	12	23
	Male.....	36	6	3	5	1	.....	1	5	9	4	4	10	5	8	11	8	7	11
	Female.....	19	9	1	2	1	.....	5	5	10	5	7	5	6	8	5	3	5	12
Pulaski.....	Total.....	45	5	3	1	.....	4	3	2	3	4	3	8	2	7	5	7	5	12
	Male.....	23	2	1	.....	.....	2	.....	.....	.....	1	.....	5	.....	3	2	3	1	6
	Female.....	22	3	2	1	.....	2	3	2	3	3	3	3	.....	4	3	4	4	6
Putnam.....	Total.....	60	10	3	.....	1	3	6	7	14	10	12	13	8	12	13	18	19	23
	Male.....	34	7	1	.....	1	1	3	2	9	5	4	6	4	5	8	7	10	15
	Female.....	26	3	2	.....	.....	2	3	5	5	5	8	7	4	7	5	11	9	8
Randolph.....	Total.....	67	15	7	3	2	7	6	10	9	19	.....	4	3	11	17	17	21	19
	Male.....	35	10	5	2	1	3	2	4	5	5	3	1	1	6	6	7	11	8
	Female.....	32	5	2	1	.....	4	4	6	4	14	2	3	2	5	11	10	10	11
Ripley.....	Total.....	32	5	3	.....	.....	4	6	8	9	7	10	8	4	7	10	13	12	20
	Male.....	20	3	2	.....	.....	2	1	4	2	2	2	4	3	3	5	6	8	12
	Female.....	12	2	1	.....	.....	2	5	4	7	5	7	4	1	4	5	7	4	8
Rush.....	Total.....	41	5	2	1	.....	6	1	5	8	9	7	8	16	6	10	14	14	24
	Male.....	21	3	1	.....	.....	3	.....	2	5	1	3	3	5	5	6	8	8	11
	Female.....	20	2	1	1	.....	3	1	3	3	8	4	5	11	1	5	7	6	13
Scott.....	Total.....	27	3	3	.....	1	1	1	2	1	3	5	6	2	2	3	4	9	8
	Male.....	19	.....	3	.....	1	.....	1	.....	.....	1	.....	3	.....	.....	1	2	6	5
	Female.....	8	3	.....	.....	.....	1	.....	2	1	2	.....	3	2	2	2	2	3	3

Shelby.....	Total.....	71	10	4	.....	2	3	10	17	17	11	14	13	12	16	13	21	18	30
	Male.....	37	4	1	.....	1	2	5	10	10	5	3	6	12	5	5	8	9	17
	Female.....	34	6	3	.....	1	1	5	7	7	7	6	7	10	11	8	12	9	13
Spencer.....	Total.....	47	9	3	3	.....	5	3	6	7	5	7	4	3	9	9	6	17	14
	Male.....	27	4	.....	.....	.....	2	2	4	4	2	2	3	1	2	3	2	6	7
	Female.....	20	5	3	2	.....	3	1	2	2	5	3	4	3	6	6	4	11	7
Stark.....	Total.....	33	3	2	2	2	2	2	5	5	5	6	4	3	4	7	6	6	13
	Male.....	16	2	1	2	.....	1	1	1	3	.....	2	2	3	2	3	3	2	8
	Female.....	17	1	1	.....	2	1	1	2	2	2	5	4	2	2	4	3	4	5
Steuben.....	Total.....	28	4	4	2	1	1	3	3	6	6	1	3	6	4	6	12	15	10
	Male.....	14	4	1	.....	.....	1	3	2	3	3	1	.....	3	2	3	5	8	2
	Female.....	14	.....	3	2	.....	.....	.....	1	3	3	.....	.....	.....	3	2	7	7	8
St. Joseph.....	Total.....	304	40	17	12	8	24	14	29	58	45	27	34	40	55	47	37	54	73
	Male.....	161	17	9	8	2	10	5	14	29	19	16	18	24	24	29	31	30	36
	Female.....	143	23	8	4	6	14	9	15	29	26	11	16	16	26	16	17	24	37
Sullivan.....	Total.....	119	26	11	6	1	10	5	11	23	15	15	17	8	14	10	23	17	16
	Male.....	63	17	8	4	1	4	3	4	13	5	7	9	5	10	3	12	8	6
	Female.....	56	9	3	2	.....	6	2	2	7	9	8	8	8	4	7	11	9	10
Switzerland.....	Total.....	33	7	3	2	.....	1	3	3	3	4	4	2	4	4	7	5	14	9
	Male.....	21	4	2	1	.....	1	3	1	3	4	2	1	1	1	4	3	7	5
	Female.....	12	3	1	1	.....	.....	.....	2	2	.....	.....	2	1	3	.....	2	7	4
Tippecanoe.....	Total.....	76	6	6	3	2	8	10	16	16	15	15	18	7	31	22	26	39	57
	Male.....	53	4	3	1	1	2	5	9	9	7	7	11	6	13	11	12	23	25
	Female.....	23	2	3	2	1	1	5	7	7	8	8	7	1	18	11	14	16	32
Tipton.....	Total.....	43	9	1	3	3	9	4	6	12	8	4	9	9	8	8	11	11	17
	Male.....	23	5	.....	1	1	4	2	3	6	1	2	4	4	5	5	6	9	9
	Female.....	20	4	1	2	.....	5	2	3	6	7	.....	5	3	3	3	5	6	8
Union.....	Total.....	11	2	.....	3	1	1	1	4	2	2	3	2	1	2	1	5	5	10
	Male.....	7	2	.....	1	1	1	1	.....	1	1	.....	2	.....	1	1	4	2	7
	Female.....	4	.....	.....	2	.....	.....	.....	4	1	1	2	.....	.....	1	1	1	3	3
Vanderburgh.....	Total.....	244	37	16	6	4	24	21	42	56	46	52	63	52	76	64	51	50	61
	Male.....	141	19	5	1	.....	14	14	17	32	20	24	33	28	28	23	23	31	31
	Female.....	103	18	11	5	4	10	7	25	24	26	28	30	24	34	36	28	27	30
Vermillion.....	Total.....	93	16	6	5	3	7	4	4	13	9	10	7	4	4	4	4	10	13
	Male.....	52	5	2	4	2	4	1	2	7	6	6	4	1	1	2	2	4	8
	Female.....	41	11	4	1	1	3	3	2	4	3	3	3	3	3	2	2	6	5

TABLE No. 3—Continued.

COUNTIES.	SEX.	0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65
							to	to	to	to	to	to	to	to	to	to	to	to	to
							10	15	20	25	30	35	40	45	50	55	60	65	70
Vigo.....	Total.....	265	59	21	9	7	24	17	36	73	45	64	68	41	63	70	54	65	67
	Male.....	132	35	10	5	3	14	13	25	38	22	37	42	28	41	47	26	29	43
	Female.....	113	24	11	4	4	10	4	11	35	23	27	26	13	22	23	28	36	24
Wabash.....	Total.....	64	8	4	1	.....	3	4	11	13	11	12	7	11	9	9	14	21	27
	Male.....	32	4	2	1	.....	.....	3	7	6	6	4	4	7	3	6	13	12	15
	Female.....	32	4	2	.....	.....	3	4	4	7	5	8	3	4	6	3	1	9	12
Warren.....	Total.....	21	4	3	2	1	2	1	5	3	4	4	7	9	5	5	2	5	8
	Male.....	11	2	.....	1	1	1	.....	.....	2	2	2	2	2	2	3	1	3	6
	Female.....	10	2	3	1	.....	1	1	2	1	2	2	5	6	3	2	1	2	2
Warrick.....	Total.....	70	19	6	4	3	10	4	7	11	12	12	7	8	8	8	11	13	13
	Male.....	45	6	3	2	1	5	1	3	6	4	4	2	4	5	3	3	9	9
	Female.....	25	13	3	2	2	5	3	4	5	8	8	5	4	3	5	8	4	4
Washington.....	Total.....	44	2	5	2	3	13	5	8	5	7	8	6	6	3	5	5	12	13
	Male.....	21	1	2	.....	1	9	4	5	2	3	5	2	2	3	2	1	5	7
	Female.....	23	1	3	2	2	4	1	3	3	4	3	4	3	.....	3	4	7	6
Wayne.....	Total.....	105	9	5	2	2	10	8	16	27	20	25	31	27	30	31	40	34	51
	Male.....	57	5	2	2	1	4	5	8	15	11	10	13	13	14	19	22	18	22
	Female.....	48	4	3	.....	1	6	3	8	12	9	15	18	14	16	12	18	16	29
Wells.....	Total.....	76	9	2	6	3	8	3	9	6	8	6	9	12	10	6	15	21	21
	Male.....	35	5	1	4	2	2	1	5	1	5	3	2	7	5	3	9	8	15
	Female.....	41	4	1	2	1	6	2	4	5	3	4	6	5	5	3	6	13	6
White.....	Total.....	23	3	3	1	.....	5	2	4	6	1	5	4	5	11	6	13	7	13
	Male.....	14	1	1	.....	.....	3	1	4	3	1	2	2	2	2	1	8	5	7
	Female.....	9	2	2	1	.....	2	1	.....	3	.....	3	2	3	6	5	5	2	6

Whitley.....	42	1	2	.....	1	2	.....	3	4	8	3	5	6	2	8	9	6	12	17
Male.....	25	.....	1	.....	1	.....	.....	2	1	4	3	1	1	1	6	7	4	5	7
Female.....	17	.....	.....	.....	.....	.....	.....	1	3	4	.....	4	5	1	2	2	2	7	10
Total males.....	4,279	643	245	170	106	343	512	312	736	639	610	688	609	772	830	895	1,081	1,357	
Total females.....	3,320	575	290	153	104	360	555	289	808	721	706	659	580	665	661	731	950	1,077	
Grand total.....	7,599		535	325	210	703	1,067	601	1,544	1,360	1,316	1,347	1,169	1,437	1,491	1,626	2,031	2,434	

TABLE No. 3—Continued.

Deaths in Indiana by Months, Counties, Ages, Sex, Color, Nationality and Conjugal Condition, 1907.

COUNTIES.	Sex.	70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
Adams.....	Total.....	22	20	19	.....	2	230	.....	200	29	1	92	97	39	2	230
	Male.....	11	11	11	.....	1	112	.....	97	15	.....	47	47	16	2	112
	Female.....	11	9	8	.....	1	118	.....	103	14	1	45	50	23	.....	118
Allen.....	Total.....	84	76	87	15	2	1,114	14	864	249	15	462	418	240	8	1,128
	Male.....	45	38	36	8	1	608	5	469	133	11	282	240	83	8	613
	Female.....	39	38	51	7	1	506	9	395	116	4	180	178	157	.....	515
Bartholomew.....	Total.....	21	24	34	2	.....	356	8	344	16	4	147	137	79	1	364
	Male.....	8	10	24	1	.....	178	3	173	7	1	77	72	32	.....	181
	Female.....	13	14	10	1	.....	178	5	171	9	3	70	65	47	1	183
Benton.....	Total.....	8	10	9	3	3	147	.....	129	14	4	68	51	23	5	147
	Male.....	3	5	7	2	3	83	.....	69	10	4	38	28	12	5	83
	Female.....	5	5	2	1	.....	64	.....	60	4	.....	30	23	11	.....	64
Blackford.....	Total.....	15	14	14	2	.....	219	1	205	15	.....	93	85	42	.....	220
	Male.....	9	7	9	1	1	118	1	108	11	.....	53	51	15	.....	119
	Female.....	6	7	5	1	.....	101	.....	97	4	.....	40	34	27	.....	101
Boone.....	Total.....	22	34	33	6	2	322	7	321	6	2	130	119	79	1	329
	Male.....	11	16	17	4	.....	163	5	164	3	1	71	64	33	.....	168
	Female.....	11	18	16	2	2	159	2	157	3	1	59	55	46	1	161
Brown.....	Total.....	8	5	12	4	3	137	.....	136	1	.....	63	50	23	1	137
	Male.....	4	3	5	1	.....	68	.....	67	1	.....	36	24	8	.....	68
	Female.....	4	2	7	3	3	69	.....	69	.....	.....	27	26	15	1	69
Carroll.....	Total.....	23	18	26	4	.....	220	.....	205	11	4	82	91	47	.....	220
	Male.....	9	9	14	1	.....	114	.....	105	5	4	50	49	15	.....	114
	Female.....	14	9	12	3	.....	106	.....	100	6	.....	32	42	32	.....	106

Cass.....	48	34	33	6	3	494	2	431	53	12	189	187	105	15	496
Male.....	28	17	21	2	1	280	1	240	36	5	120	103	47	11	281
Female.....	20	17	12	4	2	214	1	191	17	7	69	84	58	4	215
Clark.....	27	30	31	2	2	397	69	425	34	7	213	165	83	5	406
Male.....	11	22	11	2	1	221	31	226	21	5	119	93	36	4	252
Female.....	16	8	20	.....	1	176	38	199	13	2	94	72	47	1	214
Clay.....	25	27	31	3	4	430	5	370	55	10	196	160	72	7	435
Male.....	16	12	17	.....	3	246	1	202	37	8	116	97	30	4	247
Female.....	9	15	14	.....	1	184	4	168	18	2	80	63	42	3	188
Clinton.....	26	28	33	8	.....	377	2	370	6	3	141	140	95	3	379
Male.....	12	16	17	.....	.....	194	4	189	4	2	79	75	39	2	195
Female.....	14	12	16	5	.....	183	1	181	2	1	62	65	56	1	184
Crawford.....	14	6	12	5	1	170	.....	161	7	2	66	68	36	.....	170
Male.....	5	4	6	.....	.....	80	.....	75	4	1	35	32	13	.....	80
Female.....	9	2	6	3	1	90	.....	86	3	1	31	36	23	.....	90
Davies.....	15	20	20	1	2	356	2	338	18	2	186	116	52	4	358
Male.....	9	11	10	1	1	188	1	175	13	1	106	67	14	2	189
Female.....	6	9	10	.....	1	168	1	163	5	1	80	49	38	2	169
Dearborn.....	26	35	44	2	2	311	5	242	67	7	129	118	62	7	316
Male.....	16	20	24	.....	2	149	5	110	37	7	61	66	21	6	154
Female.....	10	15	20	2	.....	162	.....	132	30	.....	68	52	41	1	162
Decatur.....	19	29	35	8	2	286	1	260	23	4	114	106	66	1	28
Male.....	9	18	22	4	2	145	1	124	18	4	54	66	25	1	146
Female.....	10	11	13	4	.....	141	.....	136	5	.....	60	40	41	.....	141
Dekalb.....	35	32	32	7	.....	309	1	277	29	4	93	135	79	3	310
Male.....	23	17	12	6	.....	147	1	147	16	1	51	84	27	2	164
Female.....	12	15	20	1	.....	146	.....	130	13	3	42	51	52	1	146
Delaware.....	33	30	42	2	3	640	35	650	21	4	338	233	103	1	675
Male.....	15	12	21	1	2	334	19	336	14	3	201	117	34	1	353
Female.....	18	18	21	1	1	306	16	314	7	1	137	116	69	.....	322
Dubois.....	17	24	20	1	3	243	1	187	51	6	104	82	56	2	244
Male.....	10	15	14	1	3	140	1	109	29	3	62	30	28	1	141
Female.....	7	9	6	.....	.....	103	.....	78	22	3	42	32	28	1	103
Elkhart.....	59	53	66	10	1	652	1	587	60	6	228	271	145	9	653
Male.....	27	26	37	4	1	309	.....	277	28	4	113	136	53	7	309
Female.....	32	27	29	6	.....	343	1	310	32	2	115	135	92	2	344

TABLE No. 3—Continued.

COUNTIES.	Sex.	70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
Fayette	Total	18	10	13	2	.....	175	4	156	22	1	63	72	41	3	179
	Male	11	5	7	1	.....	91	3	80	14	.....	31	42	18	3	94
	Female	7	5	6	1	.....	84	1	76	8	1	32	30	23	.....	85
Floyd	Total	32	38	36	2	.....	415	39	382	61	1	184	152	118	.....	454
	Male	13	16	23	1	.....	207	17	189	34	1	96	89	39	.....	224
	Female	19	22	13	1	.....	208	22	203	27	.....	88	63	79	.....	230
Fountain	Total	25	21	35	3	.....	283	1	274	7	3	104	125	55	.....	284
	Male	18	11	18	1	.....	148	1	144	4	1	56	74	19	.....	149
	Female	7	10	17	2	.....	135	.....	130	3	2	48	51	36	.....	135
Franklin	Total	22	21	28	3	1	212	.....	177	35	.....	86	67	57	2	212
	Male	12	10	14	2	1	122	.....	103	19	.....	59	38	25	.....	122
	Female	10	11	14	1	.....	90	.....	74	16	.....	27	29	32	2	90
Fulton	Total	24	22	20	2	.....	200	.....	189	10	1	74	71	53	2	200
	Male	12	13	11	1	.....	104	.....	97	7	.....	49	37	17	1	104
	Female	12	9	9	1	.....	96	.....	92	3	1	25	34	36	1	96
Gibson	Total	24	27	21	3	.....	356	28	356	22	6	164	147	72	1	384
	Male	13	13	13	3	.....	185	15	181	16	3	89	81	29	1	200
	Female	11	14	8	.....	.....	171	13	175	6	3	75	66	43	.....	184
Grant	Total	69	62	63	5	2	793	47	775	62	3	369	254	208	9	840
	Male	53	39	41	4	2	479	32	461	49	1	224	152	128	7	511
	Female	16	23	22	1	.....	314	15	314	13	2	145	102	80	2	329
Greene	Total	22	23	23	3	3	469	1	438	27	5	243	160	62	5	470
	Male	12	11	12	.....	1	236	.....	215	19	2	131	80	22	3	236
	Female	10	12	11	3	2	233	1	223	8	3	112	80	40	2	234
Hamilton	Total	36	26	30	2	.....	350	7	346	8	3	134	147	70	6	357
	Male	18	15	8	2	.....	186	3	185	3	1	75	87	22	5	189
	Female	18	11	22	.....	.....	164	4	161	5	2	59	60	48	1	168

Hancock.....	Total.....	20	22	29	4	3	311	2	299	13	1	133	114	63	3	313
	Male.....	10	11	12	1	1	147	2	142	6	1	142	54	22	2	149
	Female.....	10	11	17	3	1	164	.....	157	7	.....	62	60	41	1	164
Harrison.....	Total.....	27	17	25	4	1	254	8	237	20	5	115	93	53	1	262
	Male.....	17	5	13	2	1	124	3	112	13	2	64	45	17	1	127
	Female.....	10	12	12	2	.....	130	5	125	7	3	51	48	36	.....	135
Hendricks.....	Total.....	28	26	34	4	3	296	7	292	8	3	104	122	72	5	303
	Male.....	14	15	18	2	3	160	3	155	6	2	53	70	36	4	163
	Female.....	14	11	16	2	.....	136	4	137	2	1	51	52	36	1	140
Henry.....	Total.....	31	22	30	6	1	361	11	361	10	1	160	134	75	3	372
	Male.....	12	12	13	3	.....	174	3	172	7	1	92	64	23	1	180
	Female.....	19	10	17	3	1	187	5	189	3	.....	68	70	52	2	192
Howard.....	Total.....	27	28	34	5	1	394	16	388	17	5	190	140	79	1	410
	Male.....	14	16	17	3	1	201	6	192	11	4	96	80	30	1	207
	Female.....	13	12	17	2	.....	193	10	196	6	1	94	60	49	.....	203
Huntington.....	Total.....	33	35	36	7	1	356	.....	324	27	5	135	143	76	2	356
	Male.....	19	21	18	4	.....	189	.....	171	16	2	73	93	21	2	189
	Female.....	14	14	18	3	1	167	.....	153	11	3	62	50	55	.....	167
Jackson.....	Total.....	27	19	27	5	1	375	4	336	39	4	190	118	71	.....	379
	Male.....	14	8	14	1	.....	186	3	164	23	2	93	72	24	.....	189
	Female.....	13	11	13	4	1	189	1	172	16	2	97	46	47	.....	190
Jasper.....	Total.....	13	14	10	.....	.....	171	.....	145	26	.....	90	59	21	1	171
	Male.....	9	7	6	.....	.....	97	.....	85	12	.....	55	32	9	1	97
	Female.....	4	7	4	.....	.....	74	.....	60	14	.....	35	27	12	.....	74
Jay.....	Total.....	19	24	28	2	.....	340	2	329	12	1	151	131	59	1	342
	Male.....	11	13	14	1	.....	173	2	168	6	1	84	64	26	1	175
	Female.....	8	11	14	1	.....	167	.....	161	6	.....	67	67	33	.....	167
Jefferson.....	Total.....	28	24	38	9	2	326	19	312	26	7	122	143	75	5	345
	Male.....	16	12	18	4	1	166	10	161	10	5	72	76	24	4	176
	Female.....	12	12	20	5	1	160	9	151	16	2	50	67	51	1	169
Jennings.....	Total.....	10	17	15	6	.....	199	2	179	20	2	91	68	40	2	201
	Male.....	4	7	8	2	.....	93	.....	85	7	1	45	34	12	2	93
	Female.....	6	10	7	4	.....	106	2	94	13	1	46	34	28	.....	108
Johnson.....	Total.....	27	24	32	4	2	291	11	289	5	8	87	143	70	2	302
	Male.....	16	13	16	1	1	150	7	162	1	3	166	91	25	1	166
	Female.....	11	11	16	3	1	132	4	127	4	5	38	52	45	.....	136

TABLE No. 3—Continued.

COUNTIES.	Sex.	70 to 75	75 to 80	80 to 90	90 and over	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
Knox.	Total.	29	22	28	2	3	472	18	446	37	7	222	180	85	3	409
	Male.	13	12	16	1	1	254	10	258	22	4	123	106	32	3	264
Kosciusko.	Female.	16	10	12	2	2	218	8	208	15	3	99	74	53	...	226
	Total.	24	33	40	4	4	333	...	320	12	1	120	129	83	1	333
Lagrange.	Male.	14	21	26	4	4	171	17	161	9	1	57	75	38	1	171
	Female.	10	12	14	...	...	162	...	159	3	...	63	54	45	...	162
Lake.	Total.	18	19	24	2	...	178	...	165	13	...	60	68	49	1	178
	Male.	8	10	12	1	1	94	...	87	7	...	36	41	17	...	94
Laporte.	Female.	10	9	12	1	...	84	...	78	6	...	24	27	32	1	84
	Total.	26	25	40	1	8	949	4	611	299	43	557	257	91	48	953
Lawrence.	Male.	15	13	17	1	8	594	3	551	206	40	353	155	42	47	597
	Female.	11	12	23	...	...	355	1	260	93	3	204	162	49	1	356
Madison.	Total.	58	48	56	4	2	626	7	443	176	14	267	235	119	12	633
	Male.	23	29	27	1	2	234	5	234	89	11	150	134	38	12	334
Marion.	Female.	35	19	29	3	...	297	2	209	87	3	117	101	81	...	299
	Total.	21	18	16	5	2	433	3	419	17	...	215	154	65	2	436
Marshall.	Male.	10	9	7	1	1	229	1	219	11	...	123	85	20	2	230
	Female.	11	9	9	4	1	204	2	200	6	...	92	69	45	...	206
Marshall.	Total.	54	43	54	10	5	840	17	797	42	18	392	298	162	5	857
	Male.	29	23	30	3	4	439	10	412	26	11	214	170	160	5	449
Marshall.	Female.	25	20	24	7	1	401	7	385	16	7	178	128	102	...	408
	Total.	246	207	222	31	6	3,436	577	3,439	536	38	1,716	1,441	815	41	4,013
Marshall.	Male.	131	103	91	13	4	1,854	298	1,828	303	21	1,018	801	303	30	2,152
	Female.	115	104	131	18	2	1,582	279	1,611	233	17	698	640	512	11	1,861
Marshall.	Total.	34	31	19	7	2	296	1	258	29	10	103	124	66	4	297
	Male.	15	17	10	4	2	150	1	130	15	6	58	65	25	3	151
Marshall.	Female.	19	14	9	3	...	146	...	128	14	4	45	59	41	1	146

Martin.....	Total.....	8	11	13	2	1	173	.....	162	5	6	75	72	25	1	173
	Male.....	8	4	7	1	1	91	.....	83	3	5	45	38	7	1	91
	Female.....	.....	7	6	.....	.....	82	.....	79	2	1	30	34	18	.....	82
Miami.....	Total.....	23	27	30	5	1	363	3	334	23	9	133	151	80	2	366
	Male.....	13	15	16	1	1	191	2	176	12	5	80	83	28	2	193
	Female.....	10	12	14	4	.....	172	1	158	11	4	53	68	52	.....	173
Monroe.....	Total.....	19	15	24	1	.....	283	8	278	5	8	130	111	50	.....	291
	Male.....	10	7	10	1	.....	151	5	146	5	5	74	65	17	.....	156
	Female.....	9	8	14	.....	.....	132	3	132	.....	3	56	46	33	.....	135
Montgomery.....	Total.....	47	35	38	2	1	397	11	394	9	5	138	166	102	2	408
	Male.....	26	19	17	1	1	209	6	210	3	2	80	96	39	.....	215
	Female.....	21	16	21	1	.....	188	5	184	6	3	58	70	63	2	193
Morgan.....	Total.....	24	19	26	4	1	284	3	275	7	5	108	105	72	2	287
	Male.....	16	13	8	2	1	151	2	147	3	3	69	53	29	2	153
	Female.....	8	6	18	2	.....	133	1	128	4	2	39	52	43	.....	134
Newton.....	Total.....	10	8	5	3	.....	96	2	85	13	.....	31	38	28	1	98
	Male.....	4	3	2	2	.....	46	1	39	8	.....	18	18	10	1	47
	Female.....	6	5	3	1	.....	50	1	46	5	.....	13	20	18	.....	51
Noble.....	Total.....	27	36	34	4	.....	302	.....	275	25	2	94	125	82	1	302
	Male.....	15	14	19	3	.....	149	.....	135	12	2	47	71	30	1	149
	Female.....	12	22	15	1	.....	153	.....	140	13	.....	47	54	52	.....	153
Ohio.....	Total.....	5	9	13	2	.....	75	6	73	7	1	24	33	23	1	81
	Male.....	2	5	4	1	.....	41	2	39	4	.....	16	20	6	.....	43
	Female.....	3	4	9	1	.....	34	4	34	3	1	8	13	17	.....	38
Orange.....	Total.....	14	9	16	2	2	216	4	211	3	6	94	89	35	2	220
	Male.....	8	6	6	1	1	120	4	121	.....	3	63	48	11	2	124
	Female.....	6	3	10	1	1	96	.....	90	3	3	31	41	24	.....	96
Owen.....	Total.....	17	15	16	5	1	177	1	165	10	3	65	79	31	3	178
	Male.....	10	10	10	1	.....	91	.....	84	5	2	35	43	13	.....	91
	Female.....	7	5	6	4	1	86	1	81	5	1	30	36	18	3	87
Parke.....	Total.....	23	20	17	4	.....	303	5	290	14	4	137	116	54	1	308
	Male.....	13	13	10	2	.....	172	1	161	9	3	81	61	30	1	173
	Female.....	10	7	72	2	.....	131	4	129	5	1	56	55	24	.....	135
Perry.....	Total.....	9	15	18	2	1	190	6	157	38	1	86	77	33	.....	196
	Male.....	7	8	12	.....	1	97	3	81	18	1	44	44	12	.....	100
	Female.....	2	7	6	2	.....	93	3	76	20	.....	42	33	21	.....	96

Shelby.....	Total.....	31	27	35	6	4	377	8	363	16	6	156	146	80	3	385
Male.....	Male.....	12	16	14	1	3	179	2	172	6	3	83	77	19	2	181
Female.....	Female.....	19	11	21	5	1	198	6	191	10	3	73	69	61	1	204
Spencer.....	Total.....	17	18	20	2	.....	198	16	191	22	1	86	85	42	1	214
Male.....	Male.....	9	10	14	2	.....	99	6	94	15	.....	47	47	50	1	109
Female.....	Female.....	8	8	6	.....	.....	99	6	97	7	1	39	35	31	.....	105
Starke.....	Total.....	12	3	7	2	1	134	1	106	27	2	57	59	19	.....	135
Male.....	Male.....	8	1	3	1	1	67	1	52	14	2	31	30	7	.....	68
Female.....	Female.....	4	2	4	1	.....	67	.....	54	13	.....	26	29	12	.....	67
Steuben.....	Total.....	26	16	27	1	1	186	.....	172	14	.....	56	80	49	1	186
Male.....	Male.....	16	6	18	.....	1	102	.....	95	7	.....	29	52	20	1	102
Female.....	Female.....	10	10	9	.....	.....	84	.....	77	7	.....	27	28	29	.....	84
St. Joseph.....	Total.....	61	46	63	9	.....	1,082	15	854	220	23	553	360	172	12	1,097
Male.....	Male.....	27	30	37	1	.....	564	9	439	120	14	300	195	69	9	573
Female.....	Female.....	34	16	26	8	.....	518	6	415	100	9	253	165	103	3	524
Sullivan.....	Total.....	19	19	26	6	4	416	2	401	10	7	213	133	67	5	418
Male.....	Male.....	12	8	15	.....	1	217	1	206	7	5	122	73	21	2	218
Female.....	Female.....	7	11	11	6	3	199	1	195	3	2	91	60	46	3	200
Switzerland.....	Total.....	14	20	12	2	.....	156	.....	143	12	1	65	57	33	1	156
Male.....	Male.....	8	9	9	2	.....	90	.....	81	8	1	39	37	13	1	90
Female.....	Female.....	6	11	3	.....	.....	66	.....	62	4	.....	26	20	20	.....	66
Tippecanoe.....	Total.....	63	54	52	8	5	549	6	439	102	14	194	201	154	6	555
Male.....	Male.....	35	28	21	3	2	288	3	238	45	8	121	114	51	5	291
Female.....	Female.....	28	26	31	5	3	261	3	201	57	6	73	87	103	1	264
Tipton.....	Total.....	16	22	23	4	3	243	.....	231	9	3	98	92	50	3	243
Male.....	Male.....	8	8	10	2	2	118	.....	111	5	2	55	44	16	3	118
Female.....	Female.....	8	14	13	2	1	125	.....	120	4	1	43	48	34	.....	125
Union.....	Total.....	7	12	9	.....	.....	83	1	80	4	.....	31	36	17	.....	84
Male.....	Male.....	2	9	3	.....	.....	44	1	41	4	.....	17	23	5	.....	45
Female.....	Female.....	5	3	6	.....	.....	39	.....	39	.....	.....	14	13	12	.....	39
Vanderburgh.....	Total.....	67	61	72	10	1	1,006	170	960	195	21	522	373	274	7	1,176
Male.....	Male.....	41	31	37	6	1	529	82	498	102	11	300	206	100	5	611
Female.....	Female.....	26	30	35	4	.....	477	88	462	93	10	222	167	174	2	565
Vermillion.....	Total.....	17	12	13	3	10	264	7	230	37	4	156	76	37	2	271
Male.....	Male.....	12	6	6	1	6	142	2	118	24	2	87	41	14	2	141
Female.....	Female.....	5	6	7	2	4	122	5	112	13	2	69	35	23	.....	127

TABLE No. 3—Continued.

COUNTIES.	Sex.	70 to 75		75 to 80		80 to 90		90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
		70 to 75	75	75 to 80	80	80 to 90	90												
Vigo.....	Total.....	65	47	65	4	10	1,157	82	1,070	136	33	572	401	221	45	1,239		45	1,289
	Male.....	35	18	31	2	10	655	51	593	87	26	360	234	73	39	706		39	739
	Female.....	30	29	34	2	...	502	31	477	49	7	212	167	148	6	533		6	533
Wabash.....	Total.....	31	32	36	6	...	332	2	306	24	4	119	114	69	2	334		2	334
	Male.....	20	14	18	3	...	179	1	163	14	3	66	87	26	1	180		1	180
	Female.....	11	18	18	3	...	153	1	143	10	1	53	57	43	1	154		1	154
Warren.....	Total.....	9	17	9	3	3	131	1	127	4	1	50	57	25	...	132		...	132
	Male.....	4	4	4	1	...	65	...	61	3	1	28	28	9	...	65		...	65
	Female.....	5	6	5	2	3	66	1	66	1	...	22	29	16	...	67		...	67
Warriek.....	Total.....	18	18	19	2	2	278	7	263	21	1	139	102	43	1	285		1	285
	Male.....	12	10	12	2	2	154	4	142	15	1	78	56	24	...	158		...	158
	Female.....	6	8	7	...	...	124	3	121	6	...	61	46	19	1	127		1	127
Washington.....	Total.....	15	24	22	2	2	217	...	213	3	1	95	72	50	...	217		...	217
	Male.....	8	14	8	1	1	108	...	105	2	1	52	35	21	...	108		...	108
	Female.....	7	10	14	1	1	109	...	108	1	...	43	37	29	...	109		...	109
Wayne.....	Total.....	56	48	60	13	1	609	42	575	62	14	249	237	155	10	651		10	651
	Male.....	33	24	26	10	1	315	20	304	27	4	134	134	60	7	335		7	335
	Female.....	23	24	34	3	...	294	22	271	35	10	115	103	95	3	316		3	316
Wells.....	Total.....	18	21	22	2	...	293	...	276	11	6	131	105	56	1	293		1	293
	Male.....	12	11	13	2	...	151	...	142	4	5	64	67	19	1	151		1	151
	Female.....	6	10	9	...	...	142	...	134	7	1	67	38	37	...	142		...	142
White.....	Total.....	15	11	20	6	...	164	...	153	10	1	53	65	45	1	164		1	164
	Male.....	7	4	9	1	...	81	...	74	6	1	31	39	11	...	81		...	81
	Female.....	8	7	11	5	...	83	...	79	4	...	22	26	34	...	83		...	83

hitley	19	12	24	6	192	172	19	1	69	77	44	2	192
Male.....	9	8	14	6	106	93	12	1	38	48	19	1	106
Female.....	10	4	10	.....	86	79	7	.....	31	29	25	1	86
Total males.....	1,404	1,288	1,442	190	18,492	16,771	2,146	334	8,773	7,404	2,771	303	19,251
Total females.....	1,200	1,176	1,391	212	16,509	15,443	1,588	179	6,673	5,884	4,576	77	17,210
Grand total.....	2,604	2,464	2,833	402	35,001	32,214	3,734	513	15,446	13,288	7,347	380	36,461

TABLE No. 4.

Deaths in Indiana by Counties, for the Year 1907.

STATE AND COUNTIES.	IMPORTANT AGES.					DEATHS FROM IMPORTANT CAUSES.																					
	Population, Estimated 1907. $\frac{3}{4}$ x School Census.	Total Deaths Reported for Year 1907.	Annual Death Rate Per 1,000 Population.	Stillbirths.	Under 15 Years.					Pulmonary Consumption.	Other forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrheal Diseases under 2.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicæmia.	Cancer.	Violence.	Smallpox.		
					Under 1 Year.	1 to 4 inclusive.	5 to 9 inclusive.	10 to 14 inclusive.	15 to 19 inclusive.																	20 Years and over.	
State of Indiana.	2,714,744	36,461	13.4	2,019	7,599	2,286	703	601	1,067	10,737	3,888	634	933	336	17	91	213	136	3,202	1,639	180	666	196	1,513	2,464	8	
Northern Counties	937,919	11,686	12.4	649	2,473	699	211	183	326	3,661	1,076	177	234	122	6	32	53	29	1,026	501	52	209	55	538	841	6	
Adams.....	26,341	230	8.7	16	56	7	1	3	15	72	24	3	10	1					19	10	1	1	3	14	16		
Allen.....	92,477	1,128	12.1	49	199	53	25	25	35	345	116	22	21	14			2	1	108	35	4	11	6	61	88		
Benton.....	12,610	147	11.6	11	36	17	.....	4	1	39	5	2	5	2					12	8	2	2	1	6	17	
Blackford.....	16,793	220	13.1	14	55	18	.....	6	6	61	28	6	5	1			1	3	17	15	7	1	1	13	16	
Carroll.....	19,239	220	11.4	17	46	9	2	3	8	84	15	2	6			2			17	7	1	3	.....	12	9	
Cass.....	36,165	496	13.7	22	83	30	9	5	11	144	50	7	7	9		1	1		46	13	3	10	.....	19	42	
Dekalb.....	25,263	310	12.2	15	41	15	5	5	7	130	26	7	11			3			29	10	10	13	.....	10	11	
Elkhart.....	46,578	653	14.0	26	116	28	13	11	13	237	57	7	7	11		2	3	3	55	14	3	14	5	41	43		
Fulton.....	18,438	200	10.8	10	42	10	1	1	6	79	14	2	1			1		2	13	6	3	10	2	9	13		
Grant.....	60,025	840	13.9	56	165	49	20	13	21	282	97	10	13	16			4		71	21	3	10	4	34	41		
Howard.....	30,283	410	13.5	47	115	19	12	8	17	117	43	8	11	6		1	1		37	9	.....	8	3	17	27	1
Huntington.....	30,793	356	11.5	16	70	19	4	4	10	134	32	10	7	4				1	30	9	4	5	.....	12	22	
Jasper.....	15,622	171	10.0	3	44	18	6	6	3	45	15	9	5	5		1	1		22	12	3	3	.....	3	10	
Jay.....	27,951	342	12.2	21	72	28	7	8	14	101	45	7	7	4			6	1	25	31	3	4	3	15	20		
Kosciusko.....	28,941	333	11.5	9	55	18	7	5	10	126	32	4	7				1		22	10	1	6	1	16	20		
Lagrange.....	15,330	178	11.6	10	28	11	3	3	2	75	9	4	3	1					14	2	1	9	.....	5	7	
Lake.....	57,076	953	16.6	56	287	100	21	10	27	127	59	10	33	11		1	6	19	4	101	120	3	8	4	23	146	
Laporte.....	60,903	633	10.3	13	114	46	9	12	19	207	68	6	12	3		3	4	3	53	18	6	12	1	31	54		
Marshall.....	25,623	297	11.5	19	58	14	2	4	8	116	23	3	1						27	14	5	12	2	16	17		

Miami.....	31,325	366	11.6	23	62	17	3	5	12	104	39	7	13	8	.....	.....	.....	27	11	.....	6	2	23	24
Norton.....	10,710	98	9.1	2	16	5	4	.....	3	33	9	1	3	3	.....	.....	.....	9	3	.....	3	.....	3	6
Noble.....	22,841	302	13.2	16	56	8	5	2	5	129	19	4	3	2	1	.....	.....	25	8	1	15	1	25	14
Porter.....	20,506	239	11.6	2	42	10	3	6	90	.....	8	.....	3	1	.....	.....	.....	28	6	3	5	3	14	21
Pulaski.....	16,541	163	9.8	11	45	9	4	3	2	56	13	.....	1	.....	.....	.....	.....	12	4	2	9	1	3	8
Starke.....	12,232	135	11.0	8	33	9	2	2	5	37	9	2	1	.....	.....	.....	.....	18	4	1	.....	4	4	8
Steuben.....	13,678	186	13.5	5	28	11	1	3	3	80	11	5	3	.....	.....	.....	.....	13	5	4	2	2	11	10
St. Joseph.....	73,997	1,097	14.8	84	304	77	24	14	29	252	118	18	14	14	2	4	.....	100	70	4	9	6	53	71
Wabash.....	29,662	334	11.2	18	64	13	3	4	11	132	34	5	9	1	.....	.....	.....	26	7	.....	5	1	16	12
Wells.....	24,174	293	12.1	22	76	20	8	3	9	84	31	2	6	4	.....	.....	.....	21	12	1	3	1	13	14
White.....	18,602	164	8.8	10	23	7	5	2	4	65	12	1	4	.....	.....	.....	.....	11	4	.....	8	3	10	9
Whitley.....	17,300	192	11.0	18	42	4	2	3	4	78	15	3	2	1	.....	.....	.....	18	3	.....	.....	.....	6	25
Central Counties.....	1,042,828	15,743	15.0	882	3,205	889	301	249	448	4,621	1,681	306	351	126	4	44	108	43	1,363	688	70	280	96	646	1,094
Bartholomew.....	24,090	364	15.1	25	79	16	7	3	11	119	36	9	14	1	.....	.....	.....	39	13	1	9	3	22	14
Boone.....	24,902	329	13.2	19	72	17	9	5	6	117	38	6	8	3	.....	.....	.....	25	14	1	6	2	13	19
Brown.....	10,213	137	13.4	9	33	9	2	7	3	47	10	4	3	3	.....	.....	.....	21	7	1	5	1	9	5
Clay.....	38,293	435	11.3	18	90	49	14	7	6	115	39	4	9	4	1	4	.....	28	32	3	8	.....	9	29
Clinton.....	28,367	379	13.3	26	66	23	3	10	10	125	32	11	12	7	.....	.....	.....	50	7	5	10	1	19	17
Decatur.....	17,822	287	16.1	14	64	14	6	3	3	114	29	4	6	.....	.....	.....	.....	28	11	.....	9	.....	8	12
Delaware.....	50,305	675	13.4	42	172	70	13	16	24	133	61	13	14	9	.....	.....	.....	53	48	3	11	.....	12	53
Fayette.....	12,768	179	14.0	14	43	7	.....	1	2	60	11	2	4	.....	.....	.....	.....	17	7	.....	3	.....	13	18
Fountain.....	20,753	284	13.6	13	57	9	5	7	7	100	36	6	10	3	.....	.....	.....	32	8	.....	10	1	17	7
Franklin.....	16,145	212	13.1	12	46	7	1	1	1	92	21	4	3	.....	.....	.....	.....	14	14	1	11	3	6	10
Hamilton.....	29,337	357	12.1	22	77	16	4	7	10	135	36	4	8	1	2	1	2	.....	17	14	3	10	.....	16
Hancock.....	19,442	313	16.0	18	68	20	8	5	8	97	33	7	10	3	.....	.....	.....	26	14	2	5	3	14	17
Hendricks.....	20,349	303	14.8	16	52	8	5	10	9	114	30	5	8	5	.....	.....	.....	29	14	1	10	.....	13	12
Henry.....	32,716	372	15.6	22	82	23	3	5	14	108	36	3	6	.....	.....	.....	.....	25	26	2	3	1	17	29
Johnson.....	19,911	302	15.1	13	40	13	2	5	8	115	38	4	17	2	1	1	.....	21	5	1	4	.....	15	18
Madison.....	72,873	857	11.7	62	195	59	20	15	30	211	89	15	18	10	.....	.....	.....	81	39	4	12	6	29	47
Marion.....	207,270	4,013	19.3	248	824	192	78	54	121	949	102	70	28	.....	.....	.....	353	194	4	50	33	157	298	
Monroe.....	23,173	291	12.5	15	58	24	11	8	11	74	38	4	9	4	2	2	4	.....	40	7	1	6	2	13
Montgomery.....	28,280	408	14.4	17	67	14	11	4	9	157	53	9	3	2	1	2	.....	32	15	2	2	2	15	20
Morgan.....	22,354	287	12.8	15	63	16	6	2	9	96	32	9	16	1	1	.....	.....	28	11	1	6	1	13	19
Owen.....	15,438	178	11.5	8	32	8	2	2	7	67	25	3	7	1	.....	.....	.....	29	7	2	2	.....	7	11
Parke.....	23,072	308	13.3	18	72	17	11	4	13	87	26	7	12	4	.....	.....	.....	26	15	6	7	1	16	20
Putnam.....	20,748	328	15.8	26	60	14	3	6	7	117	37	9	5	1	.....	.....	.....	28	12	2	4	2	10	18
Randolph.....	28,668	331	11.5	17	67	27	7	6	10	108	32	11	6	7	.....	.....	.....	23	13	2	2	1	21	17
Rush.....	17,780	254	14.2	8	41	8	6	1	5	101	30	4	6	.....	.....	.....	.....	12	9	4	3	.....	16	13

TABLE No. 4—Continued.

STATE AND COUNCILS.	Population, Estimated, 1907. $\frac{3}{4}$ x School Census.	Total Deaths Reported for Year 1907.	Annual Death Rate Per 1,000 Population.	Stillbirths.	IMPORTANT AGES.					DEATHS FROM IMPORTANT CAUSES.																	
					Under 1 Year.	1 to 4 inclusive.	5 to 9 inclusive.	10 to 14 inclusive.	15 to 19 inclusive.	65 Years and over.	Pulmonary Consumption.	Other forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrheal Diseases under 2.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicæmia.	Cancer.	Violence.	Smallpox.	
Shelby.....	25,784	385	14.9	17	71	16	3	10	17	129	44	6	8	1	.....	1	1	28	14	2	5	2	19	34	.....	.....	.....
Tipton.....	40,271	555	13.7	17	76	17	8	10	16	234	52	5	5	3	.....	7	7	37	10	1	15	1	32	37	.....	.....	.....
Tipton.....	18,181	243	13.3	13	43	16	9	4	6	82	21	5	6	4	.....	1	.....	19	10	2	3	1	11	15	.....	.....	.....
Union.....	5,030	84	16.6	5	11	6	1	1	4	38	13	.....	1	.....	.....	.....	.....	3	1	2	2	.....	2	5	.....	.....	.....
Vernillon.....	16,194	271	16.7	16	93	20	7	4	4	58	19	4	6	5	.....	2	6	21	20	1	8	3	6	31	.....	.....	.....
Vigo.....	76,730	1,239	16.1	67	265	96	24	17	36	248	98	17	34	11	.....	4	7	10	112	58	8	10	6	40	166	.....	.....
Warren.....	10,286	132	12.8	5	21	10	2	1	5	46	14	1	1	2	.....	.....	.....	14	4	2	21	6	5	12	.....	.....	.....
Wayne.....	34,233	651	19.0	25	105	18	10	8	16	228	80	9	6	3	.....	2	3	1	52	15	2	.....	6	31	35	.....	.....
Southern Counties	733,997	9,032	12.3	488	1,921	698	191	169	293	2,455	1,131	151	348	88	7	15	52	64	813	450	58	177	45	329	529	.....	.....
Clark.....	37,873	466	12.3	23	92	26	8	5	19	119	50	9	26	4	.....	5	3	5	43	18	1	7	.....	20	20	.....	.....
Crawford.....	14,525	170	11.7	3	18	13	5	1	8	56	43	1	4	.....	.....	.....	2	1	22	5	.....	.....	2	3	8	.....	.....
Davess.....	33,978	338	10.5	25	100	31	8	7	12	83	51	13	15	7	1	.....	9	2	26	20	6	6	3	10	20	.....	.....
Deerborn.....	23,880	316	13.2	13	54	18	11	7	12	123	29	3	7	6	.....	1	9	1	38	9	1	4	3	9	15	.....	.....
Dubois.....	24,496	244	9.9	10	53	23	2	3	3	76	25	4	13	4	.....	.....	4	.....	26	17	.....	.....	.....	.....	.....	.....	.....
Floyd.....	33,680	454	13.4	17	83	25	10	7	15	154	40	6	20	4	.....	1	1	6	35	16	1	13	1	18	27	.....	.....
Gibson.....	32,418	384	11.8	19	86	33	7	8	12	97	49	2	10	4	.....	2	1	.....	38	17	4	7	3	17	20	.....	.....
Greene.....	40,233	470	11.6	28	127	50	10	10	23	86	59	9	26	3	2	.....	3	9	51	28	3	7	6	9	35	.....	.....
Harrison.....	23,180	262	11.3	16	60	21	3	10	6	85	23	2	14	2	.....	.....	3	1	22	13	2	7	1	10	8	.....	.....
Jackson.....	26,498	379	14.3	20	88	35	9	8	15	106	57	6	9	1	1	.....	1	6	35	26	3	11	2	12	15	.....	.....
Jefferson.....	22,795	345	15.1	14	45	21	5	5	5	123	61	3	8	3	.....	.....	1	2	26	15	.....	8	2	15	29	.....	.....
Jennings.....	16,334	201	12.3	6	40	16	1	3	3	60	20	5	5	3	.....	.....	2	6	17	9	1	3	1	9	12	.....	.....
Knott.....	40,225	490	12.1	33	114	41	8	12	13	108	53	1	22	3	.....	2	1	9	32	20	1	11	3	11	43	.....	.....
Lawrence.....	32,515	436	13.4	23	108	41	13	10	16	79	57	7	15	5	.....	.....	2	1	35	34	1	6	1	10	33	.....	.....
Martin.....	16,065	173	10.7	7	40	11	5	2	5	42	24	.....	6	4	.....	.....	.....	9	12	10	1	3	11	11	6	.....	.....

Ohio.....	4,298	81	18.8	1	6	6	1	3	2	28	10	3	1	...	...	...	1	...	10	3	...	4	...	4	...	6	...
Orange.....	18,777	220	11.7	6	38	15	3	3	11	57	30	5	10	...	...	...	3	...	22	6	...	7	...	7	...	8	...
Perry.....	22,550	196	8.6	6	33	15	6	7	6	59	28	2	9	...	...	...	1	...	20	9	...	3	...	3	...	11	...
Pike.....	23,145	211	11.7	25	65	26	8	4	10	56	50	10	22	...	...	...	1	...	12	17	...	10	...	10	...	17	...
Posay.....	24,174	306	12.6	11	55	28	...	...	10	85	46	15	4	...	...	...	3	...	25	18	...	14	...	14	...	22	...
Ripley.....	19,537	241	12.3	7	32	8	4	6	8	102	32	4	10	...	...	...	...	...	21	5	...	14	...	14	...	11	...
Scott.....	9,611	103	10.7	7	27	7	1	1	2	30	17	4	3	...	...	...	...	...	11	6	...	4	...	4	...	1	...
Spencer.....	23,117	214	9.2	13	47	15	5	3	6	71	24	1	6	...	...	...	...	...	15	8	...	11	...	11	...	9	...
Sullivan.....	33,178	418	12.5	33	119	44	10	5	11	86	56	9	12	...	...	...	...	...	32	33	...	7	...	7	...	37	...
Switzerland.....	10,157	156	15.3	13	33	12	1	3	3	57	25	5	5	...	...	...	...	...	6	6	...	18	...	18	...	5	...
Van Wert.....	82,334	1,176	14.2	80	244	63	24	21	42	271	128	17	26	...	...	...	2	...	115	59	...	48	...	48	...	73	...
Warrick.....	24,657	285	11.5	18	70	32	10	4	7	70	31	3	18	...	...	...	1	...	24	18	...	2	...	2	...	13	...
Washington.....	19,747	217	10.9	11	44	12	13	5	8	76	23	2	12	...	...	...	...	...	22	5	...	7	...	7	...	10	...

TABLE No. 5.

Death Rates by Counties for the Year 1907.

STATE AND COUNTIES.	Population Estimated 1907. 4 > School Census	Total Deaths Reported for the Year 1907.	Annual Death Rate per 1,000 Population.	DEATHS FROM IMPORTANT CAUSES.																Smallpox.
				Pulmonary Consumption.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrheal Diseases Under 5.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicemia.	Cancer.	Violence.		
State of Indiana.	2,714,744	36,461	13.4	143.2	23.3	34.3	12.3	.6	3.3	7.8	5.0	117.9	60.3	6.6	24.5	7.2	55.7	90.7	.2	
Northern Counties.....	937,919	11,686	12.4	114.7	18.8	24.9	13.0	.6	3.4	5.6	3.0	109.3	53.4	5.5	22.2	5.8	57.3	89.6	.6	
Adams.....	26,341	230	8.7	91.1	11.3	37.9	3.7					72.1	37.9	3.7	3.7	11.3	53.1	60.7		
Allen.....	92,477	1,128	12.1	125.4	23.7	22.7	15.1			2.1	1.0	116.7	37.8	4.3	11.8	6.4	65.9	95.1		
Benton.....	12,610	147	11.6	39.6	15.8	39.6	15.8			15.8	7.9	95.1	63.4	15.8	15.8		47.5	134.8		
Blackford.....	16,793	220	13.1	166.7	35.7	29.7	5.9			5.9	17.8	101.2	89.3	5.9	5.9		77.4	95.2		
Carroll.....	19,239	220	11.4	77.9	10.3	31.1			10.3			88.3	36.3	5.1	15.5		62.3	46.7		
Cass.....	36,165	496	13.7	138.2	19.3	19.3	24.8		2.7	2.7		127.1	35.9	8.2	27.6		52.5	116.1		
Dekalb.....	25,263	310	12.2	102.9	27.7	43.5			11.8			114.7	39.5		51.4		39.5	43.5		
Elkhart.....	46,578	653	14.0	122.3	15.0	15.0	23.6	2.1	4.2	6.4	6.4	118.0	30.0	6.4	30.0	10.7	88.0	92.3		
Fulton.....	18,438	200	10.8	75.9	10.8	5.4		5.4			10.8	70.5	32.5		54.2	10.8	48.8	70.5		
Grant.....	60,025	840	13.9	161.5	16.6	21.6	26.6			6.6		118.2	34.9	4.9	16.6	6.6	56.6	68.3		
Howard.....	30,283	410	13.5	141.9	26.4	35.9	19.8	3.3	3.3			122.1	29.7		26.4	9.9	56.1	89.1	3.3	
Huntington.....	30,793	356	11.5	103.9	32.4	22.7	12.9		3.2		3.2	97.4	29.2	12.4	16.2		38.9	71.4		
Jasper.....	15,522	171	10.0	96.6	57.9	32.2	32.2	6.4	12.8	6.4		141.7	77.3		19.3		19.3	64.4		
Jay.....	27,951	342	12.2	180.9	25.0	25.0	14.3			21.4	3.5	89.4	110.9	10.7	14.3	10.7	53.6	71.5		
Kosciusko.....	28,941	333	11.5	110.5	38.8	24.1			3.4	10.3		76.0	34.5	3.4	20.7	3.4	55.2	69.1		
Lagrange.....	15,330	178	11.6	58.7	26.0	19.5	6.5					91.3	13.0	6.5	58.7		32.6	45.6		
Lake.....	57,076	953	16.6	103.3	17.5	57.8	19.2	1.7	10.5	33.2	7.0	176.9	210.2	5.2	13.9	7.0	40.2	255.7		
Laporte.....	60,903	633	10.3	111.6	9.8	19.7	4.9		4.9	6.5	4.9	87.0	29.5	9.8	19.7	1.6	50.9	88.6		
Marshall.....	26,623	297	11.5	89.7	11.7	3.9						105.3	54.6	19.5	46.8	7.8	62.4	66.3		

Miami.....	31,325	366	11.6	124.5	22.3	41.5	25.5	.....	.....	.....	.....	86.1	35.1	.....	19.1	6.3	73.4	76.6	6.3
Newton.....	10,710	98	9.1	84.0	9.3	28.0	28.0	.....	.....	.....	.....	84.0	28.0	.....	28.0	.....	28.0	56.0	.....
Noble.....	22,841	202	13.2	83.1	17.5	13.1	8.7	.....	4.3	.....	.....	109.4	33.0	4.3	63.6	4.3	109.4	61.2	.....
Porter.....	20,506	239	11.6	39.0	.....	13.6	4.8	.....	4.8	.....	.....	136.5	29.2	14.6	24.3	14.6	63.2	102.4	.....
Pulaski.....	16,541	163	9.8	78.5	.....	6.0	.....	.....	.....	.....	.....	72.5	24.1	12.0	54.4	6.0	18.1	48.3	6.0
Stark.....	12,232	135	11.0	73.5	16.3	8.1	.....	.....	.....	.....	.....	147.1	32.7	8.1	.....	.....	32.7	65.4	.....
Steuben.....	13,678	186	13.5	80.4	36.5	21.9	.....	14.6	.....	.....	.....	95.0	36.5	.....	29.2	14.6	80.4	73.1	.....
St. Joseph.....	73,997	1,097	14.8	159.4	24.3	18.9	18.9	1.3	8.1	2.7	5.4	135.1	94.5	5.4	12.1	8.1	71.6	95.9	2.7
Wabash.....	29,662	334	11.2	114.6	16.8	30.3	3.3	.....	3.3	3.3	3.3	87.6	23.5	.....	16.8	3.3	53.9	40.4	.....
Wells.....	24,174	293	12.1	128.2	8.3	24.8	16.5	.....	16.5	4.1	53.7	86.8	49.6	4.1	12.4	4.1	53.7	54.1	.....
White.....	18,602	161	8.8	69.7	5.3	21.5	.....	.....	.....	.....	.....	59.1	21.5	.....	43.0	16.1	53.7	48.3	.....
Whitley.....	17,300	192	11.0	86.7	17.3	11.5	5.7	.....	.....	5.7	.....	104.0	17.3	.....	.....	.....	34.6	144.5	.....
Central Counties.....	1,042,828	15,743	15.0	161.1	29.3	33.6	12.0	3	4.2	10.3	4.1	130.7	65.9	6.7	26.8	9.2	61.9	104.9	1
Bartholomew.....	24,090	364	15.1	149.4	37.3	58.1	4.1	.....	16.6	12.4	.....	161.8	53.9	4.1	37.3	12.4	91.3	58.1	.....
Boone.....	24,902	329	13.2	152.5	24.0	32.1	4.0	.....	4.0	.....	.....	100.3	56.2	4.0	24.0	8.0	52.2	76.2	.....
Brown.....	10,213	137	13.4	97.9	39.1	29.3	29.3	.....	9.7	9.7	9.7	205.6	68.5	9.7	48.9	9.7	88.1	48.9	.....
Clay.....	38,233	435	11.3	101.8	10.4	23.5	10.4	.....	2.6	10.4	2.6	73.1	83.5	7.8	20.8	.....	23.5	75.7	.....
Clinton.....	28,367	379	13.3	113.1	38.7	42.3	24.6	.....	3.5	3.5	3.5	176.2	24.6	17.6	35.2	3.5	66.9	59.9	.....
Decatur.....	17,822	287	16.1	162.7	22.4	33.6	.....	5.6	5.6	.....	.....	157.1	61.7	.....	50.4	.....	44.8	67.3	.....
Delaware.....	50,305	675	13.4	121.2	25.8	27.8	17.8	.....	19.8	.....	.....	105.3	95.4	5.9	17.8	21.8	23.8	105.3	.....
Fayette.....	12,768	179	14.0	86.1	15.6	31.3	.....	.....	.....	.....	.....	133.1	54.8	.....	23.4	.....	101.8	140.9	.....
Fountain.....	20,783	284	13.6	173.2	28.8	48.1	14.4	.....	9.6	4.8	.....	183.9	38.4	.....	48.1	4.8	51.7	33.6	.....
Franklin.....	16,145	212	13.1	136.0	24.7	18.5	.....	.....	6.1	.....	.....	86.7	86.7	6.1	68.1	18.5	3.7	61.9	.....
Hamilton.....	29,337	357	12.1	122.7	13.6	27.2	3.4	6.8	.....	.....	.....	57.9	47.7	10.2	34.0	.....	54.5	54.5	.....
Hancock.....	19,442	313	16.0	169.7	36.0	51.4	15.4	.....	.....	.....	.....	133.7	72.0	10.2	25.7	15.4	72.0	87.4	.....
Hendricks.....	20,349	303	14.8	147.4	24.5	39.3	24.5	.....	9.8	4.9	.....	142.5	68.7	4.9	49.1	.....	63.8	58.9	.....
Henry.....	23,716	372	15.6	131.7	12.6	25.2	.....	.....	33.7	.....	.....	109.6	8.4	12.6	4.2	4.2	71.6	122.2	.....
Johnson.....	19,911	302	15.1	190.7	20.0	80.3	10.0	.....	5.0	5.0	.....	105.4	25.1	5.0	20.0	.....	75.3	90.4	.....
Madison.....	72,873	857	11.7	122.1	20.5	24.7	13.7	.....	4.1	.....	.....	101.1	53.5	5.4	16.4	8.2	39.7	64.4	.....
Martin.....	207,270	4,013	19.3	237.3	49.2	33.7	13.5	.....	10.6	23.1	.....	170.3	93.5	1.9	24.1	15.9	75.7	143.7	.....
Monroe.....	23,173	291	12.5	163.9	17.2	38.8	17.2	.....	8.6	.....	.....	172.6	30.2	4.3	25.8	8.6	56.1	86.3	9
Montgomery.....	28,280	408	14.4	187.4	31.8	10.6	7.0	.....	3.5	7.0	.....	113.1	53.0	7.0	42.4	7.0	53.0	70.7	.....
Morgan.....	28,354	287	12.8	133.1	40.2	71.5	4.4	.....	4.4	.....	.....	125.2	49.2	4.4	26.8	4.4	58.1	84.9	.....
Owen.....	15,438	178	11.5	161.9	19.4	45.3	6.4	.....	.....	6.4	.....	187.8	45.3	12.9	12.9	.....	45.3	71.2	.....
Parke.....	23,072	308	13.3	161.9	30.3	52.0	17.3	.....	.....	.....	.....	112.6	65.0	26.0	30.7	4.3	69.3	86.6	.....
Putnam.....	20,748	328	15.8	178.3	43.3	24.0	4.8	.....	4.8	.....	.....	131.9	57.8	9.6	19.2	9.6	48.1	86.7	.....
Randolph.....	28,668	331	11.5	111.6	38.3	20.9	24.4	.....	6.9	.....	.....	80.2	45.3	6.9	6.9	3.4	73.2	59.2	.....
Rush.....	17,780	254	14.2	168.7	22.4	33.7	.....	.....	.....	.....	.....	67.4	50.6	22.4	16.8	5.6	89.9	73.1	.....

TABLE No. 5—Continued.

STATE AND COUNTIES.	Population Estimated 1907. 34 x School Census	Total Deaths Reported for the Year 1906.	Annual Death Rate per 1,000 Population.	DEATHS FROM IMPORTANT CAUSES.																
				Pulmonary Consumption.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrheal Diseases Under 5.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicæmia.	Cancer.	Violence.	Smallpox.	
Shelby.....	25,784	385	14.9	170.6	23.2	31.0	8.8				3.8	3.8	108.5	54.2	7.7	19.3	7.7	73.6	131.8	
Tippecanoe.....	40,271	555	13.7	129.1	12.4	12.4	7.4				17.3	17.3	91.8	24.8	2.4	37.2	2.4	79.4	91.8	
Tipton.....	18,181	243	13.3	115.5	27.5	33.0	22.0				5.5		104.5	55.0	11.0	16.5	5.5	60.5	82.5	
Union.....	5,050	84	16.6	257.4		19.8							39.4	19.8	39.6	39.6		39.6	99.0	
Vermillion.....	16,194	271	16.7	117.3	24.7	37.0	30.8				12.3	37.0	129.6	123.5	6.1	49.4	18.5	37.0	191.4	
Vigo.....	76,730	1,239	16.1	127.7	22.1	44.3	14.3				5.2	9.1	145.9	75.5	10.4	13.0	7.8	52.1	216.3	
Warren.....	10,286	132	12.8	136.1	9.7	9.7	19.4				5.8	2.9	136.1	38.8		61.3	19.4	48.6	116.6	
Wayne.....	34,233	651	19.0	233.6	26.2	17.5	8.7				8.7		151.9	43.8	5.8		17.5	90.5	102.2	
Southern Counties.....	733,997	9,032	12.3	154.0	20.5	47.4	11.9	.9	2.0	7.0	8.7	110.7	61.3	7.9	24.1	6.1	44.8	72.0		
Clark.....	37,873	466	12.3	132.0	23.7	68.6	10.5		13.2	7.9	13.2	113.5	47.5	2.6	18.4		52.8	52.8		
Crawford.....	14,525	170	11.7	293.0	6.8	27.5				13.7	6.8	151.4	34.4		55.0		20.6	55.0		
Daviess.....	33,978	358	10.5	150.0	38.2	44.1	30.6	2.9			5.8	76.5	58.8	17.6	17.6		23.5	44.1		
Dearborn.....	23,880	316	13.2	121.4	12.5	29.3	25.1		4.1	37.6	4.1	159.1	37.6	4.1	16.7	12.5	41.8	83.7		
Dubois.....	24,496	244	9.9	102.0	16.3	53.0	16.3			16.3		106.1	69.3		12.2		36.7	61.2		
Floyd.....	33,680	454	13.4	118.7	17.8	89.0	11.8		2.9	2.9	17.8	103.9	47.5	2.9	38.5	2.9	53.4	80.1		
Gibson.....	32,418	384	11.8	151.1	6.1	30.8	12.3		6.1	3.0		117.2	52.4	12.3	21.5	9.2	52.4	61.6		
Greene.....	40,253	470	11.6	146.5	22.3	64.5	7.4	4.9			22.3	126.6	69.5	7.4	17.3	14.9	22.3	89.4		
Harrison.....	23,180	262	11.3	93.2	8.6	60.3	8.6		12.9	12.9	12.9	91.9	56.0	8.6	30.1	4.3	43.1	34.5		
Jackson.....	26,498	379	14.3	215.1	22.6	33.9	3.7	3.7		3.7	22.6	132.9	98.1	11.3	41.5	7.5	45.2	56.6		
Jefferson.....	22,705	345	15.1	267.6	13.1	35.0	13.1			4.3	8.7	114.0	65.8		35.0	8.7	65.8	127.2		
Jennings.....	16,334	201	12.3	183.6	30.6	30.6	18.3			12.2	36.7	104.0	55.1	6.1	19.3	6.1	55.1	73.4		
Knox.....	40,225	490	12.1	131.7	2.4	54.6	7.4		4.9	2.4	9.9	129.2	49.7	2.4	27.3	7.4	27.3	106.8		
Lawrence.....	32,515	436	13.4	175.3	21.5	46.1	15.3			6.1	27.6	107.6	104.5	3.0	18.4	3.0	30.7	101.4		
Martin.....	16,065	173	10.7	149.3	37.3	37.3	24.8		6.2		6.2	74.6	62.2	6.2			68.4	37.3		

Ohio.....	4,298	81	18.8	232.6	69.8	23.2	5.3	.....	22.2	.....	5.3	.....	232.6	69.8	21.3	15.9	10.6	.....	93.0	139.6	.....
Orange.....	18,777	220	11.7	1,99.7	26.6	53.2	5.3	.....	15.9	.....	5.3	.....	117.1	31.9	21.3	15.9	10.6	.....	37.2	42.6	.....
Perry.....	22,550	196	8.6	124.1	8.1	39.9	8.1	.....	4.4	.....	4.4	.....	51.6	39.9	4.4	26.6	4.4	.....	13.3	48.7	.....
Pike.....	23,145	271	11.7	216.0	43.2	95.0	4.3	.....	4.3	.....	.....	.....	51.8	73.4	8.6	4.3	.....	.....	43.2	73.4	.....
Posey.....	24,174	306	12.6	190.2	62.0	16.5	8.2	.....	12.4	.....	12.4	.....	103.1	74.4	12.4	45.5	8.2	.....	57.9	91.0	.....
Ripley.....	19,537	241	12.3	163.7	20.4	51.6	5.1	.....	.....	.....	.....	.....	107.4	25.6	10.2	51.6	5.1	.....	71.6	56.8	.....
Scott.....	9,611	103	10.7	176.8	41.6	31.2	.....	.....	.....	.....	.....	.....	114.4	62.4	10.4	20.9	.....	.....	41.6	10.4	.....
Spencer.....	23,117	214	9.2	103.8	4.3	25.9	17.3	.....	8.6	.....	.....	.....	64.8	34.6	8.6	25.9	.....	.....	47.5	58.9	.....
Sullivan.....	33,178	418	12.5	108.5	27.1	56.1	21.0	.....	3.0	.....	3.0	.....	96.4	99.4	9.0	15.0	12.0	.....	21.0	115.5	.....
Switzerland.....	10,157	156	15.3	246.1	49.2	49.2	.....	.....	9.8	.....	.....	.....	59.0	59.0	59.0	39.0	.....	.....	177.2	49.2	.....
Vanderburgh.....	82,334	1,176	14.2	156.4	20.6	31.5	10.9	.....	2.4	.....	2.4	.....	19.6	71.6	6.0	14.5	9.7	.....	58.2	88.6	.....
Warren.....	24,657	285	11.5	125.7	12.1	73.0	28.3	.....	4.0	.....	4.0	.....	97.3	73.0	8.1	20.2	8.1	.....	40.5	52.7	.....
Washington.....	19,747	217	10.9	116.4	10.1	60.7	5.0	.....	.....	.....	.....	.....	111.4	25.3	10.1	20.2	.....	.....	35.4	50.6	.....

TABLE No. 6.

Annual Death Rates for Eight Years, 1900 to 1908, with Averages of Cities of 5,000 Population and Over, Compared With Rural and State Rates.

	Popula- tion.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Aver- age.
STATE.....	2,714,744	14.2	13.8	12.8	12.2	13.5	13.7	13.5	13.4	13.4
CITIES—										
Indianapolis.....	219,154	20.3	16.9	16.2	18.1	17.4	16.0	16.4	16.4	17.2
Evansville.....	63,957	15.2	14.5	11.2	14.7	14.9	14.4	15.1	13.8	14.2
Fort Wayne.....	50,947	13.1	14.8	14.1	14.8	14.0	13.9	16.3	15.7	14.6
Terre Haute.....	52,805	16.1	19.1	20.6	18.3	23.1	21.0	22.5	17.6	19.8
Anderson.....	22,509	16.5	17.5	16.7	14.6	15.5	12.1	13.3	13.1	14.9
Muncie.....	23,118	19.9	16.0	16.7	18.1	17.8	16.0	14.8	15.7	16.9
South Bend.....	44,605	16.1	15.0	14.6	19.2	15.9	17.1	16.8	16.1	16.3
Elkhart.....	17,501	16.1	13.2	12.5	14.3	15.4	13.6	14.0	14.2	14.1
Elwood.....	14,858	17.4	15.1	14.0	14.7	13.4	11.6	8.4	8.6	12.9
Hammond.....	15,956	10.5	14.8	18.1	19.1	15.4	15.2	17.9	17.2	16.0
Huntington.....	11,047	12.9	13.4	13.2	16.5	17.1	12.7	13.4	12.2	13.9
Jeffersonville.....	10,840	17.5	22.3	19.5	21.7	20.3	17.7	19.7	20.2	19.8
Kokomo.....	12,019	16.2	16.0	16.1	20.8	18.5	18.7	20.0	18.1	18.0
Lafayette.....	19,238	14.5	16.8	17.9	18.4	21.5	21.6	18.6	16.0	18.1
Logansport.....	17,932	15.4	17.5	15.1	15.9	17.6	17.1	16.0	14.8	16.1
Marion.....	24,030	16.9	15.8	15.5	17.5	16.6	14.0	13.6	11.5	15.1
Michigan City.....	17,292	10.7	14.7	14.5	18.6	14.7	14.1	14.3	15.4	14.6
New Albany.....	20,628	17.4	18.0	17.4	16.6	18.1	18.1	16.1	17.6	17.4
Peru.....	11,648	12.6	13.0	13.4	12.1	13.3	11.2	13.8	13.5	12.8
Richmond.....	19,602	17.4	16.6	18.3	14.0	15.8	14.0	16.1	15.2	15.9
Vincennes.....	11,393	12.5	19.2	17.8	15.1	22.2	20.7	20.0	18.5	18.2
Washington.....	10,045	14.9	16.5	14.6	15.5	15.9	14.2	16.5	11.5	14.9
Alexandria.....	8,823	12.3	16.1	13.9	14.1	11.4	4.4	6.9	7.9	10.9
Bedford.....	7,221	10.5	10.9	12.4	11.3	19.5	18.1	18.0	19.2	14.9
Bloomington.....	7,437	10.8	11.8	17.3	14.8	16.9	18.9	19.7	14.7	15.6
Brazil.....	8,538	7.8	10.0	14.1	8.0	20.0	12.5	12.8	16.9	12.7
Columbus.....	8,976	18.4	16.3	15.8	15.8	18.5	14.8	17.1	15.1	16.4
Connersville.....	7,751	12.7	16.0	13.2	13.9	17.6	14.8	15.3	15.3	14.8
Crawfordsville.....	6,873	17.1	16.4	17.4	13.9	20.5	20.0	20.3	22.1	18.4
East Chicago.....	7,500	4.0	6.5	10.1	9.3	12.4	14.5	18.5	32.2	13.4
Frankfort.....	7,572	17.3	15.5	14.1	17.0	15.1	20.0	18.7	17.6	16.9
Goshen.....	8,521	14.0	10.6	11.8	11.1	12.5	14.0	18.1	16.3	13.5
Greensburg.....	5,609	15.8	20.3	17.6	16.9	18.5	16.2	21.2	14.7	17.6
Hartford City.....	7,362	8.8	12.2	12.0	11.1	13.0	12.0	8.8	11.9	11.2
Laporte.....	7,136	13.1	15.4	13.7	17.3	18.2	17.5	20.7	19.8	16.9
Linton.....	9,767	.....	.....	8.6	9.7	12.5	11.8	11.7	10.4	10.7
Madison.....	8,936	19.4	16.3	18.0	18.1	17.7	15.0	18.4	19.8	17.8
Mishawaka.....	6,436	11.4	10.5	13.8	17.0	19.2	24.3	21.4	21.9	17.4
Mt. Vernon.....	5,303	19.0	21.6	22.4	16.0	17.9	18.4	17.9	18.8	18.7
Portland.....	5,507	12.8	13.2	16.7	12.1	13.6	14.1	16.7	13.0	14.0
Princeton.....	7,227	9.8	11.0	10.9	9.6	15.3	17.2	13.9	14.5	12.5
Seymour.....	6,888	14.2	13.9	12.9	13.0	16.1	15.8	15.6	16.6	14.7
Shelbyville.....	7,556	12.9	14.2	13.7	14.7	16.5	16.5	16.4	14.0	14.8
Vandalia.....	6,756	11.9	11.9	10.9	13.9	15.6	11.5	12.4	11.2	12.4
Wabash.....	9,944	11.3	11.0	13.8	9.8	14.3	12.7	13.0	12.0	12.2
Whiting.....	5,500	.....	.....	.....	.....	11.4	10.3	14.1	14.7	12.6
Average.....	.....	14.6	15.3	15.3	15.4	16.8	15.8	16.4	15.6	15.6
COUNTRY.....	1,694,250	14.3	14.9	13.3	12.9	14.2	13.9	13.3	11.6	13.5

TABLE A.

Births by Months, Color and Nationality of Parents, for the Year Ending December 31, 1907.

COUNTIES.	1907.												SEX.		COLOR.				NATIONALITY OF PARENTS.						Not Re-ported.												
																	Total.		White.		Col'd.		American.			Foreign.		Fathers.	Mothers.								
													Males.	Females.	Males.	Females.			Males.	Females.			Fathers.	Mothers.		Fathers.	Mothers.										
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.																									
	Adams.....	29	35	28	40	21	47	39	44	58	46	40	51	245	233	478	245	233	245	233	3	5	233	444		451	12	6	17	16	137	137					
Allen.....	112	76	81	91	137	101	132	239	133	142	126	134	793	711	1,504	790	706	790	706	3	5	1,504	1,161	1,216	186	131	137	137	137	137							
Bartholomew.....	35	43	51	52	65	46	55	57	50	53	44	30	296	285	581	294	282	294	282	2	3	581	562	569	8	3	3	3	3	1							
Benton.....	19	20	14	16	17	20	15	15	17	17	26	17	103	108	211	103	107	103	107	2	2	211	195	202	9	2	2	2	2	2							
Blackford.....	28	33	36	45	27	21	21	31	29	33	32	35	209	162	371	207	160	207	160	2	2	371	342	339	24	29	2	2	2	2	2						
Boone.....	45	38	32	31	37	29	34	38	32	32	34	35	229	188	417	227	187	227	187	2	1	417	407	409	1	1	1	1	1	1	1						
Brown.....	22	10	13	26	10	10	20	12	15	22	14	18	109	83	192	109	83	109	83	...	...	192	185	190	...	...	5	5	5	5	5		
Carroll.....	41	28	26	34	33	22	36	27	28	31	35	33	205	169	374	205	169	205	169	...	...	374	364	365	2	2	2	2	2	2	2				
Cass.....	46	37	53	33	29	26	34	53	53	67	62	53	270	276	546	270	273	270	273	3	3	546	517	521	17	14	5	5	5	5	4						
Clark.....	40	37	36	25	35	31	38	35	36	41	52	34	260	180	440	235	167	235	167	25	13	440	426	435	7	7	2	2	2	2	2						
Clay.....	39	37	52	58	52	29	28	56	47	22	37	15	249	223	472	248	222	248	222	1	1	472	429	445	42	26	...	...	...	...	...	
Clinton.....	51	40	45	30	43	34	49	51	36	53	46	47	287	238	525	286	238	286	238	1	1	525	515	513	1	2	...	...	...	...	...	
Crawford.....	18	22	20	14	16	20	20	16	22	17	14	16	113	102	215	113	102	113	102	...	...	215	139	152	58	46	17	16	16	16	16				
Davies.....	48	61	79	59	56	44	53	74	68	79	57	70	382	366	748	378	366	378	366	4	4	748	731	741	1	1	9	9	9	9	9						
Dearborn.....	33	31	22	33	32	18	26	34	18	24	36	34	184	157	341	181	155	181	155	3	2	341	326	328	6	5	5	5	5	5	4						
Decatur.....	29	23	31	31	23	31	30	51	32	43	35	27	189	197	386	188	196	188	196	1	1	386	378	379	...	2	3	3	3	3	3						
Dekalb.....	39	32	22	38	20	6	91	42	29	21	14	20	200	174	374	200	174	200	174	...	...	374	340	349	22	17	8	8	8	8	4				
Delaware.....	130	103	90	110	111	75	119	112	99	106	92	91	629	609	1,238	612	592	612	592	17	17	1,238	1,193	1,207	25	18	7	7	7	7	7						
Dubuois.....	39	36	35	32	28	15	32	29	42	20	11	164	174	164	338	174	164	174	164	...	...	338	337	338	...	...	...	...	...	...	...
Elkhart.....	83	43	53	56	41	24	82	57	60	81	89	99	380	388	768	378	386	378	386	2	2	768	707	724	40	33	17	17	17	17	7						
Fayette.....	25	23	27	35	24	18	14	30	25	28	29	23	166	135	301	162	131	162	131	4	4	301	288	288	2	3	7	7	7	7	6						
Floyd.....	27	20	30	45	27	19	21	36	35	38	43	46	210	177	387	196	161	196	161	14	16	387	376	382	7	3	2	2	2	2	3						
Fountain.....	23	36	36	46	34	22	24	21	31	40	32	42	203	184	387	203	184	203	184	...	...	387	373	372	7	10	3	3	3	3	1				
Franklin.....	25	26	11	19	18	12	21	21	21	26	11	19	120	110	230	120	110	120	110	...	...	230	192	191	24	22	11	11	11	11	11				
Fulton.....	20	19	17	17	25	26	27	22	33	38	26	25	163	132	295	163	132	163	132	...	...	295	291	293	1	1	2	2	2	2	2				

TABLE A—Continued.

COUNTIES.	1907.												Sex.		Color.				Nationality of Parents.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
													Males.	Females.	Total.	White.				American.		Foreign.		Fathers.	Mothers.	Fathers.	Mothers.	Not Re-ported.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Gibson.....	46	55	48	46	34	28	38	56	47	73	56	54	299	282	581		287	271			566	571	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

Morgan.....	10	12	27	19	37	12	11	13	8	27	32	125	123	248	125	121	2	242					
Newton.....	23	24	27	36	34	27	30	29	16	21	16	18	155	132	287	184	132	253					
Noble.....	23	28	38	32	34	32	35	40	26	39	34	40	221	182	403	221	182	379					
O'Connell.....	5	5	3	3	2	9	6	6	7	5	35	35	23	36	33	20	3	35					
Oho.....	11	6	9	41	37	18	23	16	14	24	17	22	119	119	238	118	115	253					
Orange.....																							
Owen.....	16	22	23	22	22	28	27	24	15	36	16	29	157	123	280	155	122	276					
Parke.....	22	18	32	23	17	16	10	30	36	40	36	36	148	138	316	158	158	287					
Perry.....	23	18	26	30	31	25	38	28	29	24	24	28	167	157	324	166	155	314					
Pike.....	34	30	31	47	33	21	28	41	51	34	21	24	204	418	214	203	1	411					
Porter.....	26	19	21	38	23	24	38	32	34	23	31	171	181	362	171	181	34	314					
Possey.....	35	21	31	35	27	28	27	41	44	44	44	31	205	203	408	203	2	399					
Pulaski.....	11	8	16	9	9	6	8	12	16	30	20	17	88	73	161	88	73	150					
Putnam.....	44	38	39	25	32	32	36	44	42	27	36	37	217	211	428	218	4	412					
Ran.John.....	46	43	52	58	48	47	51	66	47	56	44	55	321	286	607	317	284	586					
Ripley.....	38	18	11	79	27	17	32	32	20	39	21	31	187	178	365	187	177	80					
Rush.....	25	22	20	27	19	22	22	27	15	26	30	27	138	144	282	134	140	277					
Scott.....	8	12	14	12	18	10	16	15	20	18	12	13	88	85	173	88	85	173					
Shelby.....	32	28	13	30	16	14	10	42	24	44	34	32	170	139	309	170	138	205					
Spencer.....	30	28	53	37	28	13	35	29	9	33	29	34	192	176	368	186	172	223					
Stark.....	20	10	18	22	26	23	13	13	18	9	14	22	113	95	208	113	95	162					
Steuben.....	19	16	8	7	13	10	10	10	10	10	12	21	70	85	155	15	148	146					
St. Joseph.....	137	140	143	170	159	136	185	168	183	186	132	192	107	894	1,951	1,048	885	1,097					
Sullivan.....	117	20	41	27	22	25	24	49	76	53	66	66	58	311	620	309	310	1,590					
Tipton.....	11	16	10	17	17	7	16	13	16	17	22	26	115	79	194	114	79	189					
Tippecanoe.....	50	46	29	43	37	42	38	50	54	56	46	58	292	257	549	291	263	495					
Tipton.....	48	20	47	43	22	21	27	24	54	25	45	33	210	199	409	210	199	396					
Union.....	10	1	9	14	16	7	4	13	3	6	8	15	51	55	106	50	55	105					
Vanderburgh.....	112	115	104	120	113	156	127	127	130	115	136	733	687	1,470	1,368	50	59	1,358					
Vermillion.....	32	24	25	25	21	30	28	28	30	39	34	174	182	356	173	182	1	369					
Vigo.....	102	87	92	223	112	114	151	114	74	121	129	155	748	726	1,474	711	702	1,356					
Wabash.....	33	34	37	42	45	15	45	42	15	38	49	39	234	200	434	232	199	426					
Warren.....	12	15	6	13	9	17	13	28	19	21	31	103	102	205	103	102	2	488					
Warrick.....	45	28	27	35	25	29	28	35	37	36	46	210	189	399	205	185	5	384					
Washington.....	30	16	13	19	25	26	.....	.....	.....	24	30	36	122	97	219	122	97	216		
Wayne.....	65	71	68	65	50	14	74	61	72	59	53	56	399	309	708	380	297	679					
Wells.....	33	24	36	41	34	19	59	41	47	46	50	54	235	238	483	245	278	458					
White.....	28	15	24	19	41	20	34	34	33	23	29	24	194	130	324	194	130	310					
Whitley.....	15	23	16	30	24	28	24	21	16	28	33	22	148	132	280	148	132	272					
Grand Total.....	4,242	3,642	3,795	4,222	3,865	3,203	4,219	4,389	4,161	4,544	4,201	4,539	25,627	23,456	49,112	25,104	22,995	523,490	44,315,45,162	3,284	2,668	1,017	786

TABLE B.

Births, Number of Children Born to Each Mother, Grouped Ages of Parents, Still, Plurality and Illegitimate Births, Year Ending December 31, 1907.

COUNTIES.	NUMBER OF CHILDREN BORN TO EACH MOTHER.													
	Total Births.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth and over.	Not re-ported.
Adams.....	478	104	85	64	72	52	29	25	10	14	6	3	5	9
Allen.....	1,504	392	363	258	155	91	65	54	36	36	14	7	6	27
Bartholomew.....	111	170	111	104	64	36	34	25	9	7	4	5	8	4
Benton.....	211	63	52	26	17	10	15	8	4	6	2	.....	1	7
Blackford.....	371	83	95	71	38	21	22	15	12	8	1	.....	5	.....
Boone.....	417	135	90	54	38	35	24	13	7	7	5	3	2	4
Brown.....	33	31	26	18	11	10	11	10	12	3	5	3	2	.....
Carroll.....	374	104	87	55	40	30	14	17	11	5	2	3	2	4
Cass.....	546	173	115	96	45	35	24	14	9	8	3	4	3	14
Clark.....	440	121	86	61	58	38	29	15	13	6	3	3	6	1
Clay.....	472	146	83	55	64	35	30	19	20	6	4	4	4	2
Clinton.....	525	166	113	81	53	35	22	19	14	8	5	1	5	3
Crawford.....	215	50	52	43	18	18	8	7	6	5	5	3	.....	.....
Daviess.....	748	175	154	88	80	79	51	46	25	19	9	7	6	9
Dearborn.....	341	91	73	54	41	29	18	12	6	5	2	3	2	5
Decatur.....	386	112	71	66	50	31	21	8	8	3	3	2	1	10
DeKalb.....	374	120	82	62	32	28	17	9	10	3	5	1	1	4
Delaware.....	1,238	393	272	185	114	87	61	46	26	14	11	7	8	14
Dubois.....	538	85	68	48	37	33	26	19	27	7	5	4	.....	1
Dunkirk.....	768	264	166	109	81	52	38	23	14	9	5	1	1	5

Payette.....	301	92	57	52	32	17	22	15	8	10	2	3	2	.....	4
Floyd.....	387	110	86	58	48	28	15	20	20	8	2	2	2	.....	8
Fountain.....	387	102	88	75	36	23	21	15	12	10	4	3	.....	4	
Franklin.....	230	60	50	34	30	16	7	7	10	5	2	7	4	.....	6
Fulton.....	295	84	69	46	32	27	7	5	8	2	2	7	3	.....	1
Gibson.....	581	156	119	97	70	46	22	20	29	8	3	3	4	.....	4
Grant.....	925	247	211	146	108	74	41	30	26	14	12	6	4	.....	4
Greene.....	825	214	175	128	86	68	44	39	26	18	6	6	6	.....	9
Hamilton.....	507	161	103	84	52	35	24	18	6	9	2	2	2	.....	5
Hancock.....	336	98	79	53	33	28	11	11	9	5	3	3	3	.....	3
Harrison.....	398	114	88	52	45	29	28	15	8	6	5	4	4	.....	2
Hendricks.....	429	133	102	60	42	39	15	17	8	3	4	4	2	.....	2
Henry.....	464	122	112	71	45	35	22	10	8	4	8	2	3	.....	2
Howard.....	490	158	117	53	58	33	24	23	10	8	3	1	2	.....	3
Huntington.....	591	170	123	108	60	46	27	19	14	9	5	2	4	.....	9
Jackson.....	593	154	115	89	66	50	38	28	15	12	8	6	3	.....	9
Jasper.....	209	54	41	27	25	20	10	7	11	7	6	1	1	.....	1
Jay.....	618	161	135	97	58	52	42	23	18	8	6	4	4	.....	8
Jefferson.....	348	115	72	58	35	26	10	8	14	4	4	1	1	.....	4
Jennings.....	331	81	61	52	42	29	24	13	8	9	3	1	4	.....	4
Johnson.....	320	106	55	54	31	32	19	8	2	6	1	3	1	.....	9
Knox.....	926	215	201	150	104	81	45	35	20	18	13	8	2	.....	6
Kosciusko.....	463	137	90	83	35	46	28	16	11	5	7	2	3	.....	7
Lagrange.....	360	90	77	50	34	20	28	18	17	11	5	2	1	.....	7
Lake.....	1,028	313	220	131	109	76	54	32	18	15	17	9	10	.....	24
Laporte.....	781	233	171	137	91	51	24	23	11	14	10	5	8	.....	3
Lawrence.....	771	201	157	127	77	67	45	30	32	18	8	6	2	.....	1
Madison.....	1,290	349	298	191	134	111	75	41	29	25	14	9	2	.....	11
Marion.....	4,823	1,768	1,106	693	431	287	171	129	95	49	28	24	22	.....	20
Marshall.....	460	122	115	70	47	33	22	14	10	10	3	3	4	.....	7
Martin.....	196	39	42	33	29	10	15	6	4	4	1	2	1	.....	1
Miami.....	378	113	83	67	35	23	21	14	4	7	2	2	2	.....	5
Monroe.....	401	100	94	57	41	36	23	17	14	7	4	5	1	.....	2
Montgomery.....	594	195	127	99	48	37	34	18	14	6	8	3	3	.....	5
Morgan.....	248	67	42	53	26	9	16	10	8	6	3	2	2	.....	3
Newton.....	287	78	66	41	34	20	19	8	3	5	2	2	1	.....	8
Noble.....	403	121	74	68	46	30	25	10	8	6	3	3	2	.....	8
Ohio.....	56	18	16	7	6	2	1	1	3	1	1	1	1	.....	5
Orange.....	238	53	48	36	33	27	11	10	9	2	1	2	1	.....	3
Owen.....	280	70	55	51	27	31	13	16	7	4	1	1	1	.....	3

TABLE B—Continued.

COUNTIES.	Total Births.	NUMBER OF CHILDREN BORN TO EACH MOTHER.												
		First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth and over.	Not reported.
Parke.....	316	64	76	49	41	33	17	12	7	5	3	3	1	5
Perry.....	324	84	68	48	27	30	17	17	17	6	3	1	1	5
Pike.....	418	100	93	53	47	35	28	22	15	7	8	3	2	5
Porter.....	332	117	79	60	25	26	16	7	9	3	3	2	1	4
Posey.....	408	97	76	61	63	41	29	17	10	5	4	4	.....	1
Pulaski.....	161	43	29	14	21	11	11	8	8	5	7	1	3	.....
Putnam.....	428	116	87	72	44	35	27	18	13	3	7	2	2	1
Randolph.....	607	142	141	112	69	49	29	20	16	13	6	7	1	6
Ripley.....	365	88	81	69	45	23	16	12	10	7	5	1	1	7
Rush.....	282	75	73	42	27	25	14	12	4	3	4	.....	1	2
Scott.....	173	52	45	23	16	17	11	4	1	.....	2	.....	.....	2
Shelby.....	309	87	73	49	38	27	10	10	5	2	3	1	1	3
Spencer.....	368	87	72	44	45	33	30	23	12	3	3	1	2	13
Starke.....	208	48	35	37	19	21	13	13	7	5	1	4	5	.....
Steuben.....	155	52	39	20	21	5	5	2	2	4	.....	2	.....	3
St. Joseph.....	1,951	544	409	313	222	131	97	65	57	31	24	20	15	23
Sullivan.....	620	181	133	99	73	51	23	31	14	3	5	4	2	1
Switzerland.....	194	56	46	24	22	11	9	11	6	.....	2	1	2	4
Tipton.....	549	160	128	90	70	28	21	22	14	7	3	1	1	5
Tippecanoe.....	409	111	81	57	56	27	29	16	13	10	2	3	1	3
Union.....	106	32	20	22	10	8	5	3	3	2	.....	1	.....	2
Vanderburgh.....	1,470	494	307	207	150	99	65	49	39	26	17	4	11	2
Vermillion.....	1,356	106	79	40	47	32	22	6	10	6	3	3	2	3
Vigo.....	1,474	492	296	224	152	102	60	41	37	22	17	12	7	12

Wabash.....	434	133	103	64	50	30	14	12	8	9	3	1	2	5
Warren.....	205	60	36	37	29	14	11	6	5	1	2	.....	.....	4
Warwick.....	393	82	80	74	34	24	26	18	13	13	7	4	5	9
Washington.....	219	61	39	29	24	22	13	12	7	3	6	1	1	1
Wayne.....	708	228	131	117	55	49	25	25	12	3	9	1	.....	3
Wells.....	483	137	117	73	54	36	23	13	6	6	8	2	.....	2
White.....	324	82	50	49	31	28	23	26	7	6	4	3	5	10
Whitley.....	280	71	63	54	30	18	15	11	5	2	2	1	2	6
Grand Total.....	49,112	14,274	10,626	7,575	5,201	3,677	2,456	1,760	1,228	751	494	201	274	505

Fayette.....	37	137	154	105	91	38	12	7	1	0	3	6	4	2	3	4
Floyd.....	10	173	204	141	96	47	17	5	...	9	1	6	6	1	1	4
Fountain.....	59	167	188	136	107	58	27	9	...	4	2	8	5	4	8	3
Franklin.....	1	96	115	76	72	36	13	6	...	12	10	3	2	2	3	1
Fulton.....	2	129	108	97	81	42	16	7	1	2	...	2	1	...	...	3
Gibson.....	1	260	307	194	167	87	26	16	1	12	2	5	5	6	11	7
Grant.....	7	102	404	505	336	131	35	15	2	23	15	16	10	7	5	5
Greene.....	23	173	380	423	241	85	32	11	...	74	30	9	8	9	8	4
Hamilton.....	7	63	240	272	164	66	20	8	...	10	1	5	1	3	9	3
Hancock.....	5	33	176	92	85	51	16	6	5	5	1	1	4	...	...	3
Harrison.....	7	35	151	205	161	49	20	13	5	11	12	5	2	2	3	2
Hendricks.....	3	48	191	225	164	56	11	6	...	6	4	5	9	3	1	3
Henry.....	4	54	220	263	152	124	67	8	1	6	1	6	4	8	2	3
Howard.....	6	59	225	263	167	141	70	8	5	9	5	11	7	3	5	3
Huntington.....	4	43	265	332	221	191	79	9	...	6	1	8	6	7	2	7
Jackson.....	8	57	322	206	171	82	33	18	5	7	2	9	3	10	7	4
Jasper.....	2	20	90	113	66	58	25	10	2	12	3	8	8	12	8	6
Jav.....	15	85	272	331	217	160	29	13	...	16	4	2	2	2	1	2
Jefferson.....	5	33	143	137	98	48	17	9	1	4	2	5	2	3	1	2
Jennings.....	14	84	111	87	76	30	10	8	...	119	117	1	5	5	3	...
Johnson.....	4	37	158	185	111	83	37	10	1	1	...	4	2	6	2	6
Knox.....	0	102	372	508	359	277	131	31	7	12	2	15	13	7	12	...
Koschusko.....	5	56	217	229	154	71	26	9	1	3	6	8	2	1	2	4
Lagrange.....	7	32	142	176	133	114	32	15	5	8	...	8	5	6	2	3
Lake.....	4	69	447	615	417	290	135	50	...	1	2	5	8	...	6	1
Laporte.....	4	61	352	469	299	201	103	42	1	6	5	5	3	2	3	3
Lawrence.....	21	111	328	386	246	218	104	29	2	24	17	12	8	8	11	6
Madison.....	18	168	619	723	451	338	159	47	1	14	17	13	19	10	2	6
Marion.....	67	522	2,134	1,844	1,378	535	169	80	3	98	15	117	83	63	41	100
Marshall.....	8	44	215	255	156	130	56	21	10	4	3	14	8	9	5	4
Martin.....	3	31	80	93	71	48	25	13	1	...	1	...	...	1	...	3
Miami.....	7	34	158	198	130	91	43	19	...	28	32	8	10	5	2	...
Monroe.....	6	61	190	206	133	108	50	19	1	6	4	5	3	2	5	4
Montgomery.....	12	63	275	342	188	152	89	34	2	7	9	9	5	4	3	2
Morgan.....	2	23	104	136	73	63	46	6	2	12	9	4	5	3	...	2
Newton.....	3	33	124	154	103	74	30	7	...	21	17	5	2	3	1	1
Noble.....	4	36	159	229	167	112	49	9	2	7	2	6	3	7	5	4
Ohio.....	3	24	38	22	12	9	3	...	...	...	...	...	...	...	...	...
Ora.....	1	3	100	129	91	70	29	14	1	1	1	5	1	1	5	2
Owens.....	11	82	103	72	59	37	9	1	...	74	75	4	3	3	3	1

TABLE B—Continued.

COUNTIES.	GROUPED AGES OF PARENTS.														Still-births.		Plurality Births.		Illegitimate Births.	
	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		Not Reported.		Males.	Females.	Males.	Females.
	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Males.	Females.				
Parke.....	3	37	117	176	134	87	39	7	7	...	...	...	...	...	7	...	2	4	6	2
Perry.....	5	26	134	192	122	86	50	16	5	...	...	...	...	...	4	1	1	1	3	3
Pike.....	11	54	175	211	131	124	59	23	11	...	...	1	...	...	6	1	9	8	4	12
Porter.....	4	29	158	198	120	113	61	11	6	...	...	1	...	...	1	...	2	4	4	4
Posey.....	1	19	152	234	172	128	66	23	11	...	...	1	...	...	2	1	5	3	2	2
Pulaski.....	...	...	66	70	53	52	37	15	2	...	...	1	...	...	2	...	2	4	...	...
Putnam.....	4	46	172	225	176	131	48	20	12	...	...	3	...	...	8	1	12	9	7	2
Randolph.....	9	68	277	332	207	166	75	26	17	...	...	...	...	...	12	5	9	7	13	6
Ripley.....	6	33	45	45	29	30	21	6	3	...	...	1	...	...	277	275	1	1	1	2
Rush.....	3	27	129	156	97	86	38	12	11	...	...	...	...	...	3	...	2	2	1	1
Scott.....	5	23	79	99	67	43	18	7	1	...	...	...	1	...	2	1	3	1	1	2
Shelby.....	5	29	143	192	124	72	28	10	3	...	...	1	...	...	4	4	4	...	2	...
Spencer.....	1	30	108	168	156	123	60	23	10	...	...	...	...	...	28	19	2	4	4	2
Starke.....	3	20	71	102	84	70	40	13	6	...	...	1	...	...	1	6	3	3	2	2
Steuben.....	19	75	84	84	51	38	18	7	1	...	...	1	...	...	8	...	1	1	2	2
St. Joseph.....	8	142	847	1,093	790	600	213	67	32	...	...	3	...	...	16	37	37	23	14	14
Sullivan.....	7	161	426	308	138	125	35	17	7	...	...	...	...	...	4	2	2	1	2	2
Switzerland.....	4	18	77	104	74	53	22	10	6	...	...	2	...	...	4	3	3	1	5	1
Tipton.....	2	60	203	283	229	175	95	23	11	...	...	...	...	...	4	3	5	4	3	1
Union.....	10	42	167	202	154	135	59	21	5	...	...	1	...	...	8	1	4	1	5	8
Vanderburg.....	1	11	47	65	45	28	11	2	1	...	...	1	...	...	...	...	1	...	...	...
Vermillion.....	31	145	677	776	500	443	208	88	18	...	...	4	...	...	16	1	26	13	15	23
Vigo.....	50	139	596	824	491	381	249	91	3	...	...	2	...	...	11	15	3	4	4	1
Warrick.....	33	166	635	834	492	392	210	60	32	...	...	3	...	...	50	3	20	13	26	17

Wabash.....	8	39	208	264	161	104	48	22	4	.....	.....	.....	1	1	3	3	1	4	4	3	1
Warren.....	3	20	90	118	72	54	23	8	10	.....	.....	.....	5	3	3	2	2	2	2	3	2
Warwick.....	7	29	148	209	157	125	65	25	9	1	.....	.....	4	2	11	2	0	0	3	2	3
Washington.....	4	20	95	106	74	72	35	15	6	.....	.....	.....	2	3	5	1	6	6	3	2	2
Wayne.....	14	60	335	405	254	214	82	25	16	.....	.....	.....	4	1	8	3	3	3	6	6	6
Wells.....	10	89	234	245	154	117	66	20	10	.....	.....	.....	11	4	5	9	8	8	8	3	3
White.....	2	26	118	156	127	119	59	18	4	.....	.....	.....	11	5	3	2	6	6	3	2	2
Whitley.....	5	23	136	138	93	92	29	18	4	1	1	.....	6	4	6	2	6	6	6	2	2
Grand total.....	702	5,276	21,267	26,334	17,644	13,844	6,379	2,175	949	19	126	15	1,534	968	712	511	532	450	469	424	424

TABLE C.

Marriages by Months, Color and Nationality, Year Ending December 31, 1907.

COUNTIES.	1907.												Color.		NATIONALITY.						Total.		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	White.	Colored.	American.		Foreign.		Not Reported.				
															Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.		Grooms.	Brides.
Adams.....	16	15	18	26	24	31	12	10	19	22	10	15	218	3	209	214	9	4	4	2	218		
Allen.....	46	65	37	72	68	99	55	49	85	96	69	83	821	3	761	777	59	45	2	2	824		
Bartholomew.....	18	14	10	22	16	24	14	20	29	31	25	26	245	4	203	191	26	32	20	26	249		
Benton.....	14	12	5	5	5	10	5	5	11	9	10	7	98	1	96	98	2	2	2	2	98		
Blackford.....	11	8	13	12	10	12	8	14	13	18	9	15	142	1	132	132	11	11	11	11	143		
Boone.....	29	24	17	22	12	19	15	19	25	26	23	18	249	1	249	249	17	9	1	1	249		
Brown.....	12	5	7	6	7	13	4	4	9	3	3	11	88	1	88	88	1	1	1	1	88		
Carroll.....	9	11	14	13	8	7	11	16	22	25	13	18	167	1	167	167	24	24	3	2	167		
Cass.....	20	25	16	37	33	47	21	13	30	32	43	30	342	5	320	321	24	24	3	2	347		
Clark.....	59	58	68	80	67	94	99	110	98	116	89	98	881	155	1,019	1,024	17	12	1	1	1,036		
Clay.....	21	29	31	6	29	45	23	17	30	45	22	32	326	4	313	321	17	9	1	1	330		
Clinton.....	15	28	25	17	17	22	19	30	35	35	28	39	308	2	309	310	2	2	1	1	310		
Crawford.....	9	10	11	12	10	14	12	14	16	9	11	12	140	1	86	101	37	26	17	13	140		
Davies.....	21	22	9	22	18	13	13	19	29	16	25	20	227	3	230	230	4	4	2	2	230		
Dearborn.....	10	14	10	14	18	34	24	27	21	25	19	18	232	2	230	230	4	4	2	2	234		
Deatur.....	14	11	29	15	12	17	4	12	18	17	15	16	179	1	177	178	1	1	2	2	180		
DeKalb.....	21	17	20	11	23	22	20	10	15	18	25	22	224	1	219	223	5	1	2	2	224		
Delaware.....	66	29	20	62	28	52	98	49	34	70	40	35	562	21	575	572	8	9	2	2	583		
Dubois.....	38	36	30	28	24	42	55	23	28	60	36	32	430	2	405	403	15	12	12	17	432		
Dunkhart.....	38	36	30	28	24	42	55	23	28	60	36	32	430	2	405	403	15	12	12	17	432		

TABLE C—Continued.

COUNTIES.	1907.												Color.		NATIONALITY.						Total.		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	White.	Colored.	American.		Foreign.		Not Reported.				
															Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.		Grooms.	Brides.
Parke.....	14	17	15	18	11	21	13	16	22	20	13	21	199	2	186	191	14	9	1	1	201		
Perry.....	9	10	12	15	10	13	8	10	12	16	17	13	143	2	121	132	19	12	5	5	145		
Pike.....	12	18	21	14	16	12	9	17	20	21	19	22	199	2	199	201	2				201		
Porter.....	34	10	8	21	14	21	14	13	6	23	18	10	192		142	148	35	31	5	13	192		
Posey.....	15	10	14	13	21	22	14	18	28	27	16	15	201	12	212	213	1				213		
Pulaski.....	7	15	8	12	3	10	6	7	14	8	11	19	119	1	117	117	2	2	1	1	120		
Purnam.....	18	10	12	23	11	26	14	15	22	30	15	21	213	4	215	217	2				217		
Randolph.....	20	15	14	9	13	24	15	26	22	26	27	30	237	4	238	239	3	2			241		
Ripley.....	13	7	5	16	15	12	13	7	16	25	30	9	168						168	168	168		
Rush.....	16	10	10	9	11	15	7	10	16	15	15	21	154	1	155	155					155		
Scott.....	7	8	10	5	3	5	8	6	16	11	11	14	104		104	104					104		
Shelby.....	15	17	4	11	16	11	15	22	18	33	18	17	199	8	205	207	2				207		
Spencer.....	7	9	12	16	15	16	16	22	13	38	32	21	206	11	188	189	1		28	28	217		
Starke.....	6	6	3	14	5	4	6	7	6	6	18	5	85	1	30	39	36	27			86		
Steuben.....	15	9	11	21	12	16	11	6	8	11	18	15	152	1	152	151	1	1		1	153		
St. Joseph.....	72	66	56	69	42	85	87	67	91	61	104	84	864	20	673	711	209	168	2	5	884		
Sullivan.....	30	29	34	24	29	19	17	23	32	28	27	38	320		308	308	20	20	2	2	320		
Switzerland.....	6	11	4	7	2	9	4	1	9	9	5	7	74		74	74					74		
Tippecanoe.....	30	36	23	25	33	59	31	25	34	37	39	26	293	5	376	390	22	8			398		
Tipton.....	14	16	20	9	10	7	6	11	16	19	19	26	173		171	172	2			1	173		
Union.....	11	2		3	1	6	2		7	8	6	9	55		55	55					55		
Vanderburgh.....	58	72	76	92	84	127	81	79	80	88	119	78	947	90	983	994	46	27	8	16	1,037		
Vermillion.....	21	9	11	10	8	19	16	15	21	15	12	20	176	1	140	146	37	30		1	177		
Vigo.....	76	76	66	85	78	120	87	90	98	110	88	92	1,063	63	1,003	1,069	54	48	9		1,066		

TABLE D.

Marriages, Grouped Ages, for the Year Ending December 31, 1907.

COUNTIES.	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 and Over.		Not Reported.		Total.
	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	
Adams.....	1	75	157	127	54	16	9	22	25	15	6	1	1	1	2	1	2	1	218
Allen.....	10	125	594	568	155	92	31	13	8	4	4	4	1	1	1	1	1	1	824
Barbolenew.....	10	66	181	149	33	15	10	2	3	1	1	1	1	1	1	1	1	1	249
Benton.....	2	25	67	54	21	14	5	2	3	1	1	1	1	1	1	1	1	1	98
Blackford.....	8	48	100	76	22	12	9	6	4	1	1	1	1	1	1	1	1	1	143
Boone.....	7	73	177	144	40	14	9	6	6	5	3	6	4	1	2	1	1	1	249
Brown.....	7	36	57	36	12	9	4	3	3	1	1	1	2	1	1	1	1	1	88
Carroll.....	4	38	129	108	18	7	5	3	4	2	5	5	2	1	4	4	1	1	167
Cass.....	5	79	238	200	61	45	17	10	13	9	7	2	2	2	1	1	2	2	347
Clark.....	15	355	761	535	184	110	44	27	23	7	6	1	1	1	1	1	2	1	1,036
Clay.....	7	89	242	200	54	27	14	8	5	4	6	2	1	1	1	1	1	1	330
Clinton.....	4	98	217	138	52	31	15	12	14	6	5	3	1	1	2	2	1	1	310
Crawford.....	62	50	37	39	15	18	11	13	6	13	5	2	1	1	3	3	4	4	140
Davies.....	8	63	165	136	40	20	11	11	2	2	4	4	2	1	1	1	1	1	230
Dearborn.....	...	44	157	148	47	39	22	7	5	2	2	2	2	1	1	1	1	1	234
Deatur.....	2	41	118	109	31	17	15	3	1	4	6	2	4	4	3	4	4	4	180
Dekab.....	5	74	161	118	34	15	11	7	5	2	4	2	1	1	3	6	6	6	224
Delaware.....	21	163	415	331	91	52	31	26	14	14	9	3	2	2	8	8	8	8	583
Dubois.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Elkhart.....	9	89	306	271	77	49	20	9	12	11	6	1	1	1	1	1	1	1	432
Fayette.....	1	22	73	58	20	13	6	2	2	1	1	1	1	1	2	7	7	7	104
Floyd.....	11	50	174	162	61	49	18	11	9	6	5	5	2	2	1	2	1	1	281
Fountain.....	13	68	151	123	34	12	8	10	5	1	3	2	2	2	1	1	1	1	216
Franklin.....	2	29	95	95	35	11	6	6	2	4	5	2	3	1	1	1	1	1	145
Fulton.....	1	35	113	96	21	9	5	2	4	4	1	2	3	1	1	1	1	1	148

Gibson.....	3	58	167	140	31	10	12	9	5	3	3	1	5	2	221
Grant.....	19	172	375	303	108	44	27	26	11	16	23	5	3	2	508
Greene.....	16	112	269	196	41	31	20	9	8	4	1	2	4	2	357
Hancock.....	9	68	193	165	44	24	13	15	9	9	13	1	9	1	28
Hancock, Jr.....	5	43	117	91	25	18	9	9	6	3	1	3	3	1	106
Harrison.....	6	40	103	80	19	13	6	5	3	1	3	2	3	2	143
Henricks.....	4	48	122	66	20	11	6	2	3	1	1	3	1	29	159
Henry.....	9	71	188	149	44	32	22	15	8	8	8	2	3	5	285
Howard.....	5	80	215	184	66	42	24	20	11	8	12	5	1	1	340
Huntington.....	5	60	160	137	33	12	7	5	7	2	3	1	1	1	218
Jackson.....	57	155	125	125	34	27	17	7	6	2	4	1	1	1	222
Jasper.....	3	27	75	56	9	7	3	3	4	2	2	1	1	1	96
Jay.....	7	70	190	142	29	20	12	11	7	2	3	1	1	3	250
Jefferson.....	12	75	163	128	39	24	24	10	8	3	0	2	2	1	254
Jennings.....	2	40	107	86	30	17	5	3	3	2	1	2	2	1	150
Johnson.....	5	39	124	101	27	20	8	7	8	4	4	2	1	2	175
Knox.....	89	227	218	181	90	70	49	24	19	4	4	1	1	1	406
Kosinski.....	11	67	201	163	32	23	12	9	12	5	4	1	1	1	274
Laurance.....	8	52	102	73	26	15	6	2	6	3	4	2	1	1	148
Lake.....	1	313	625	546	327	233	169	75	46	3	4	2	2	2	1,172
Laporte.....	80	298	287	287	84	33	22	14	11	4	5	1	3	1	421
Lawrence.....	16	97	181	134	42	20	17	13	10	6	4	2	2	3	273
Madison.....	32	220	482	362	112	63	31	33	23	14	15	5	5	2	701
Marion.....	40	428	1,624	561	561	361	262	125	76	39	32	7	8	6	2,550
Marshall.....	4	46	153	128	21	13	10	10	12	3	3	1	3	1	206
Martin.....	3	40	88	62	15	11	6	2	2	1	2	3	3	1	116
Mason.....	5	61	266	188	52	20	16	11	9	10	6	4	6	1	294
Monroe.....	11	82	145	109	44	20	15	10	3	4	4	1	1	1	230
Montgomery.....	7	72	191	151	43	35	25	9	8	9	5	2	3	16	295
Morgan.....	12	77	154	123	43	18	11	12	8	5	5	1	1	1	238
Newton.....	3	23	76	70	16	4	4	3	1	1	1	1	1	1	102
Noble.....	4	46	141	116	28	17	8	5	5	3	4	2	2	1	192
Ohio.....	19	39	24	8	8	9	4	1	2	1	1	1	1	2	84
Orange.....	7	50	110	90	26	14	11	7	4	4	3	2	3	2	165
Owen.....	7	71	162	128	43	16	5	12	8	12	8	1	4	1	244
Packe.....	6	66	138	112	36	12	13	9	6	1	1	1	1	1	201
Perry.....	5	36	90	89	31	12	9	7	7	1	1	2	2	2	145
Pike.....	7	69	136	105	37	18	12	6	7	3	2	2	2	1	201
Porter.....	25	25	120	118	41	32	21	13	6	2	4	1	1	1	192
Presley.....	4	66	133	106	43	25	15	8	13	3	3	1	1	3	213
Puaski.....	4	87	87	74	15	5	6	6	6	1	1	1	1	2	190
Putnam.....	10	54	136	125	43	24	14	5	8	6	5	1	1	1	217
Randolph.....	17	72	163	125	25	24	18	10	5	6	10	3	3	1	241

TABLE No. 7.

Deaths by Occupations, Months and Ages for the Year Ending December 31, 1907.

OCCUPATIONS.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Actors and actresses.....	Males..... Females.....	1.....	1.....	1.....	.....	.....	1.....	.....	3.....	.....	.....	.....	.....
Agents.....	Males.....	11.....	9.....	5.....	5.....	7.....	6.....	4.....	9.....	5.....	5.....	2.....	6.....
Architects.....	Males.....	.....	2.....	.....	1.....	1.....	.....	.....	.....	.....	1.....	1.....	1.....
Artists.....	Males..... Females.....	.....	.....	.....	.....	1.....	1.....	.....	.....	.....	2.....	.....	.....
Auctioneers.....	Males.....	.....	.....	.....	.....	1.....	.....	.....	.....	.....	1.....	.....	1.....
Bakers and confectioners.....	Males..... Females.....	1.....	3.....	3.....	.....	5.....	2.....	4.....	2.....	.....	1.....	3.....	2.....
Bankers.....	Males.....	1.....	1.....	1.....	1.....	.....	5.....	2.....	1.....	.....	.....	.....	1.....
Barbers.....	Males.....	8.....	6.....	10.....	5.....	11.....	5.....	2.....	6.....	7.....	7.....	5.....	5.....
Bartenders.....	Males.....	5.....	9.....	8.....	11.....	4.....	7.....	6.....	8.....	9.....	13.....	9.....	3.....
Basketmakers.....	Males.....	2.....	.....	1.....	.....	.....	.....	1.....	.....	.....	.....	1.....	.....
Blacksmiths.....	Males.....	9.....	12.....	11.....	17.....	6.....	11.....	7.....	8.....	11.....	10.....	17.....	9.....
Boarding-house keepers.....	Males..... Females.....	2.....	1.....	2.....	1.....	.....	.....	1.....	2.....	.....	2.....	4.....	.....
Bookbinders.....	Males.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bookkeepers.....	Males..... Females.....	6..... 1.....	5..... 1.....	6..... 1.....	6..... 1.....	6..... 1.....	7..... 2.....	4.....	3..... 1.....	4.....	7.....	5.....	2.....

TABLE No. 7—Continued.

OCCUPATIONS.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Brewers and distillers.....	Males.....	3	3	.....	.....	.....	.....	1	1	1	.....	.....	.....
Brickmakers.....	Males.....	.....	2	1	.....	.....	.....	.....	2	1	1	3	.....
Builders and contractors.....	Males.....	9	9	5	12	6	5	7	6	3	5	5	1
Butchers.....	Males.....	1	3	4	2	5	3	3	1	2	2	6	4
Cabinetmakers.....	Males.....	7	6	6	4	12	8	5	8	9	5	3	4
Carpenters.....	Males.....	36	38	40	26	35	27	20	40	30	42	21	22
Carriage and wagonmakers.....	Males.....	2	2	5	3	2	4	1	2	2	2	2	2
Cheesemakers.....	Males.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chemists and druggists.....	Males.....	2	3	4	3	2	1	2	2	2	4	2	5
Cigarmakers.....	Males.....	.....	2	6	6	.....	1	4	1	3	1	3	2
Clergymen and clergymen.....	Males.....	9	6	9	3	9	4	3	6	2	9	6	7
.....	Females.....	1	1	1	.....	.....	.....	2	.....	.....	.....	.....	.....
Clerks.....	Males.....	16	8	10	19	7	14	22	12	15	23	14	21
.....	Females.....	4	1	1	1	1	1	5	1	3	2	4	1
Collectors.....	Males.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Commercial travelers.....	Males.....	9	7	8	10	3	5	5	5	4	2	3	3
Cooks.....	Males.....	1	.....	2	2	.....	1	.....	.....	2	1	3	3
.....	Females.....	.....	2	.....	.....	1	1	1	.....	1	.....	1	1
Coopers.....	Males.....	4	5	3	1	4	4	1	1	3	4	7	5
Dentists.....	Males.....	2	1	.....	1	2	4	1	.....	.....	1	.....	3
Draftsmen.....	Males.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....

Dressmakers.....	Females.....	5	2	3	.....	.....	.....	1	.....	3	1	1	3	2
Editors, reporters, etc.....	Males.....	2	2	4	3	1	2	1	.....	2	1	.....	1	3
Electricians.....	Males.....	1	2	4	1	3	2	2	3	3	3	.....	2	1
Elevator operators.....	Males.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Engineers.....	Males.....	13	9	13	5	11	9	9	6	8	5	9	7	8
Engravers.....	Males.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Factory hands.....	Males.....	2	6	3	2	4	1	4	4	7	8	23	6	5
	Females.....	.....	.....	1	.....	1	.....	.....	3	1	.....	.....	1	1
Farmers.....	Males.....	338	450	500	368	380	340	333	340	318	303	303	342	351
	Females.....	15	4	8	4	10	4	3	10	10	16	16	13	21
Firemen.....	Males.....	.....	.....	1	.....	5	3	2	2	2	5	1	2	1
Foremen and forewomen.....	Males.....	.....	3	1	1	.....	3	3	2	1	1	.....	2	1
	Females.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furriers.....	Males.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gardeners.....	Males.....	2	4	5	2	2	3	.....	.....	6	4	2	1	3
Glassworkers.....	Males.....	6	2	4	6	5	4	3	.....	7	5	5	2	2
Hair dressers.....	Females.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Harnessmakers and saddlers.....	Males.....	2	1	3	6	2	1	2	2	3	1	2	2	3
Horsemen.....	Males.....	2	4	2	2	2	.....	.....	2	6	1	2	3	2
Hotelkeepers.....	Males.....	2	2	.....	2	1	1	2	.....	.....	.....	1	.....	5
	Females.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Housewives.....	Females.....	544	615	645	550	478	467	426	426	513	431	475	461	490
Hunters and fishermen.....	Males.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	1	.....
Inspectors.....	Males.....	.....	.....	.....	.....	2	1	.....	.....	4	2	1	3	1
Janitors.....	Males.....	1	2	.....	2	5	.....	.....	2	.....	1	2	3	1
Laborers.....	Males.....	153	144	156	153	154	143	143	143	123	142	134	164	171
Laundry.....	Males.....	.....	1	1	.....	.....	.....	1	1	.....	.....	1	.....	.....
	Females.....	.....	.....	.....	.....	3	.....	.....	.....	2	1	1	1	1

Nurses.....	1	3			5	1	2	2	2	1	3	1
Oil well drillers.....		1			2	1	3	5	4		2	1
Opticians.....												1
Painters.....	17	12	13		9	11	13	14	9	11	8	18
Peddlers.....		2	4		4			3	2	4	2	
Photographers.....	1	1	1		1	2	3		1	1		4
Physicians.....	10	16	8		8	11	7	8	13	8	9	8
Physicians.....			1						1		1	
Plasterers.....	2	3			4	4		2	7	3	1	4
Plumbers.....	2	3	4		1	2	4	1	3		1	2
Police men.....	3	4	4		1	8	5	3	8	3	5	3
Potters.....		1	3					1				1
Printers.....	4	7	2		6	3		5	2	4	4	1
Printers.....	1											3
Professors.....			1			1				1		
Professors.....							1					
Public officials.....	4	3	2			3	2	3	5	2	4	3
Railway employes.....	31	14	12		10	16	14	10	21	19	13	21
Sailors.....	3	1	2		3	1	1	2	1	1	2	2
School teachers.....	6	5	2		3	3	2	4	3	1	4	3
School teachers.....	3	6	9			6	4	6	5	3	6	7
Seamstresses.....	1	3	4		4	1	4	1	4	2	3	2
Servants.....	1	1	2		5	4	7	5	5	3	7	2
Servants.....	32	47	34		33	25	18	21	19	32	38	33
Shoemakers.....	6	11	4		7	3	3	7	6	6	6	5
Stenographers.....	1					1						
Stenographers.....	1		1		1	2		2	1		2	4
Stock dealers.....	4		2		1		1	3	1	4	1	4

TABLE No. 7—Continued.

OCCUPATIONS.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Stonecutters.....	Males.....	3	4	3	.....	1	2	5	4	2	2	3	1
Students.....	Males.....	10	6	6	4	4	8	5	8	1	3	1	7
	Females.....	7	2	7	2	7	1	2	10	6	7	9	6
Surveyors.....	Male.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Tailors and tailoresses.....	Males.....	3	5	2	7	6	4	4	5	6	1	4	3
	Females.....	.....	.....	.....	1	.....	.....	1	1	.....	.....	.....	.....
Tanners and curriers.....	Males.....	.....	1	.....	.....	.....	.....	2	1	1	.....	1	.....
Teamsters.....	Males.....	9	8	8	9	9	11	6	6	9	8	10	10
Telegraphers.....	Males.....	2	.....	4	2	1	1	1	1	3	2	2	1
	Females.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Telephone operators.....	Females.....	3	.....	.....	.....	.....	1	.....	2	1	2	3	.....
Thsmiths.....	Males.....	2	1	3	6	3	2	2	4	2	3	1	1
Undertakers.....	Males.....	.....	.....	2	1	.....	2	.....	.....	3	3	1	2
Upholsters.....	Males.....	.....	.....	1	.....	.....	1	1	.....	1	1	2	.....
Veterinary surgeons.....	Males.....	1	1	.....	.....	.....	.....	1	.....	2	.....	.....	1
Volunteers, soldiers and pensioners.....	Males.....	2	6	5	3	5	6	1	2	2	3	4	5
Watchmakers and jewelers.....	Males.....	2	.....	4	1	1	.....	2	1	3	2	3	4
Weavers.....	Males.....	.....	.....	1	.....	1	1	1	1	.....	.....	1	.....
	Females.....	2	1	.....	1	.....	1	.....	.....	.....	1	.....	.....

No occupation.....	183	198	221	180	189	183	174	191	159	167	167	176
Males.....	389	498	514	389	360	315	374	368	332	321	306	366
Females.....												
Totals.....	1,086	1,189	1,278	1,087	1,094	1,003	1,007	1,053	976	993	1,002	1,076
	1,013	1,187	1,233	990	901	825	852	944	832	875	853	938
Total, 15 years and over.....	2,099	2,376	2,511	2,077	1,995	1,828	1,859	1,997	1,808	1,868	1,855	2,014
Under 15 years.....												
Stillbirths.....												
Ages not given.....												
Grand total.....												

Brewers and distillers.....	Males.....	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	9
Brickmakers.....	Males.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10
Builders and contractors.....	Males.....	1	1	4	4	5	8	6	5	6	13	10	3	7	7	73	
Butchers.....	Males.....	1	2	2	3	6	4	4	4	3	3	2	2			36	
Cabinetmakers.....	Males.....	1	5	4	1	4	5	9	2	9	4	6	12	11		77	
Carpenters.....	Males.....	4	10	8	10	13	19	21	37	36	38	62	37	41	4	377	
Carriage and wagonmakers.....	Males.....	1						1	2	3	3	7	3	4	2	29	
Cheesemakers.....	Males.....																
Chemists and druggists.....	Males.....	4	2	3	4		3	2	5	1	2	3	1	2		32	
Cigar-makers.....	Males.....	2	4	5	4	1		4	2	1	1	3	1	1		29	
Clergymen and clergymen.....	Males.....	1	2	2	2	6	2	6	11	12	9	4	13	3		73	4
	Females.....	1	1	2	2			1									
Clerks.....	Males.....	21	26	22	12	14	13	10	12	10	8	5	1	2		181	25
	Females.....	1	9	5	5	1	1										
Collectors.....	Males.....		2								1					3	
Commercial travelers.....	Males.....	3	2	2	8	5	8	7	9	6	5	6	2	1		64	
Cooks.....	Males.....	1	1	1	2	1	5			2	2					15	8
	Females.....		1	1	2	2	1		1			1					
Coopers.....	Males.....					3	1	4	3	3	6	7	6	8	1	42	
Dentists.....	Males.....		1	1	1	1	1	1	2	3		1		3		15	
Draftsmen.....	Males.....	1														1	
Dressmakers.....	Females.....		1	1	3	1	3	1	2	2		4	3			21	
Editors, reporters, etc.....	Males.....	2	4	1	1	3	1	2		4	1	1				20	
Electricians.....	Males.....	2	14	1	1	3	2	2			1					28	
Elevator operators.....	Males.....	1					1									2	
Engineers.....	Males.....		4	2	6	10	13	10	14	10	3	10	6	4	1	103	
Engravers.....	Males.....		1									1				1	

Lawyers.....	Males.....	1	4	1	2	2	2	8	5	14	11	8	2	5	65	
Livermen.....	Males.....			2	1	1	5	2	2	4	1	2	2	21		
Lumbermen.....	Males.....				1			2	3	7	1	2	5	23		
Machinists.....	Males.....	5	16	9	11	9	7	3	5	12	9	7	3	4	112	
Mail service.....	Males.....	3	6	2		3	7	3	3	5	3	4		1	40	
Managers and superintendents.....	Males..... Females.....				1	2	1		4	1		1	2		11	
Manufacturers.....	Males.....	1	5	3	6	5	9	3	5	9	7	5	4	6	69	
Masons.....	Males.....	1	2	3	3	3	10	8	5	8	13	11	6	13	1	89
Mechanics.....	Males.....	1	7	6	9	6	4	11	8	7	13	8	6	10		103
Merchants.....	Males.....	6	5	14	22	18	22	31	24	36	55	48	46	47	3	377
Messengers.....	Males.....	1			1							1				3
Milkmen.....	Males.....	1	1		1	1	1				1					6
Millers.....	Males.....	1	2	1	1	3	2	3	3	3	4	7	2	3		35
Milliners.....	Females.....	1	1				1	1				1	1			7
Miners.....	Males.....	13	19	9	19	16	7	11	12	10	6	9	6	2	6	151
Moulders.....	Males.....	3	1	7	6	3	4	6	4	2	3	1		2		42
Musicians.....	Males..... Females.....	2	5	3	2	3	2	1	1		1	1	1			20
Nuns.....	Females.....									1						1
Nurses.....	Females.....	2	2		2	1	3	3	1	2	3		1	1		21
Oil well drillers.....	Males.....	1	1	2	3	1	2	3	1	1	2					19
Opticians.....	Males.....			1												1
Painters.....	Males.....	2	11	12	9	11	10	19	13	15	17	13	2	3		147
Peddlers.....	Males.....	1		4	2	2	4	1	2		5	2				23
Photographers.....	Males..... Females.....	1	1	2	1	1	2	1	1	2	1	1	1			15
								1	1							1

TABLE No. 7—Continued.

OCCUPATIONS.	Sex.	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70	70 to 75	75 to 80	80 to 90	90 and over.	Un- known	Totals.	
																		Males.	Females.
Physicians.....	Males.....	1	4	3	4	2	4	14	18	20	9	11	21	3	114	3	114	3	3
	Females.....			1			1		1										
Plasterers.....	Males.....	1		2	1	2	5		5	4	7	3	3	1	34	1	34		
Plumbers.....	Males.....	1	4	3	4	2	1	2	1	1	2	2			25		25		
Policemen.....	Males.....		1	2	3	3	3	13	8	5	1	4	2	1	49	1	49		
Potters.....	Males.....	1	3		1									1	6		6		
Printers.....	Males.....	2	7	4	5	2	2	3	1	5	4	1	2	1	41		41		1
	Females.....	1																	
Professors.....	Males.....			1					1		1		1		3		3		1
	Females.....																		
Public officials.....	Males.....		1			2	1	6	4	5	5	4	4	2	34		34		
Railway employees.....	Males.....	9	33	18	17	22	18	21	11	14	10	12	4	9	1	2	201		
Sailors.....	Males.....	3	1						1	1		1	2	8	3		20		
School teachers.....	Males.....	3	7	2	2	3	3	2	1	1	1	3	2	3		2	37		59
	Females.....	2	10	8	9	2	5	4	3	4	1	4	3	2		2			
Seamstresses.....	Females.....	3	6	5	4	2	2	2	1	1	3		1	1					30
Servants.....	Males.....	2	3	6	5	4	4	10	4	1	1	2	1		2		45		371
	Females.....	41	48	42	23	24	20	15	21	25	23	28	21	17	19	4			
Shoemakers.....	Males.....	2	1	1	3			2	7	9	7	8	9	12	2		72		
Stenographers.....	Males.....	1	1														2		14
	Females.....	1	6	3	2	2													
Stock dealers.....	Males.....				1	1		1	3	1	3	4	2	1	4		21		

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The Passing of the Forest

*As long as the forest shall live,
The streams shall flow onward, still singing
Sweet songs of the woodland, and bringing
The bright living waters that give
New life to all mortals who thirst.
But the races of men shall be cursed.*

*Yea, the hour of destruction shall come
To the children of men in that day
When the forest shall pass away;
When the low woodland voices are dumb;
And death's devastation and dearth
Shall be spread o'er the face of the earth.*

*Avenging the death of the wood,
The turbulent streams shall outpour
Their vials of wrath, and no more
Shall their banks hold back the high flood,
Which shall rush o'er the harvests of men;
As swiftly receding again.*

*Lo! after the flood shall be dearth,
And the rain no longer shall fall
On the parching fields; and a pall,
As of ashes, shall cover the earth;
And dust-clouds shall darken the sky;
And the deep water wells shall be dry.*

*And the rivers shall sink in the ground,
And every man cover his mouth
From the thickening dust, in that drought;
Fierce famine shall come; and no sound
Shall be borne on the desolate air
But a murmur of death and despair.*

STATE OF INDIANA

SEVENTH ANNUAL REPORT

OF THE

State Board of Forestry

1907

W. H. FREEMAN, Secretary

To the Governor of Indiana

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.

1907

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
December 9, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, December 27, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

DECEMBER 27, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, December 27, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer December 28, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

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Indiana State Board of Forestry

OFFICIAL MEMBERS, 1907.

FINLEY C. CARSON, President.....	Michigan City
STANLEY COULTER	Lafayette
LARKIN M. STULTZ.....	Westfield
SAMUEL BURKHOLDER	Crawfordsville
WM. H. FREEMAN, Secretary.....	Wabash
AMY STOOPS, Stenographer.....	Wabash

Office of Secretary.

Room 93, State House, Indianapolis.

STATE OF INDIANA, BOARD OF FORESTRY,
INDIANAPOLIS, IND., December 1, 1907.

HON. J. FRANK HANLY, *Governor*:

Dear Sir—In compliance with the legal requirements, we have the honor to submit herewith the manuscript of the Seventh Annual Report for the Department of Forestry. It contains papers of discussion and explanation of the various work accomplished by the office and of experiments and forestry work at the State Forest Reservation and Forestry Experimental Station at Henryville, Clark County, Indiana.

We express our sincere appreciation of your courtesy and cooperation in the cause represented by this Department, and feel that the subject of forestry and the work accomplished should receive from the people an intelligent and thoughtful observance as affecting the best interests of all.

Yours very truly,

F. C. CARSON, President.

W. H. FREEMAN, Secretary.

Preface

The subject of forestry in all its various features has received as much intelligent thought and consideration the past year as any other one current movement affecting the general welfare. The most thoughtful people throughout the land are according to it their high appreciation.

It is not easy to state the exact accomplishment in the work because of inadequate means to secure data and co-operate closely with the forestry communities. Not sufficient funds are provided the Board for its systematic organization of the work throughout the State by counties or districts. The actual office expenses by reason of correspondence, arrangement and distribution of good forestry literature and other educational features, as lectures and travel, demand all the funds provided. The financial equipment of the office does no more than provide for these details well in conjunction to the office expenses of the Reservation and Experimental Station. Under the present conditions something must be neglected and it has been the systematic organization of the forestry work in the counties and data pertaining to them. Provision must be made for a competent assistant in the office and his expenses to do these things before the office can perform its duties fully and well.

As was suggested in the last report more power should be given the Board for the control of shade and ornamental trees growing along the highways and in the cities and towns against linemen. This was attempted during the last session of the General Assembly, but all was lost because of the radicalism in the bill attempted, and because at an unguarded moment the modified bill was killed on its final reading by an enemy or the accomplice of an enemy to the movement to protect such property and accord to it an intelligent regard and ownership right. The Board hopes for a concerted action to gain this needed regulation at the hands of the next General Assembly. But whatever is attempted must be intelligent and contain equal rights to all parties concerned or failure will be the result again.

The experiments at the Forestry Experimental Station are ad-

vancing very satisfactorily and at this early date are evidences of what the success of forestry may be to those who engage in it. The work now accomplished shows what practical things in forestry may be done if only attempted. As an object lesson versus theory, it may be acknowledged far beyond expectations and general belief in the degree of success. The tabulations given in the report convey an idea of the advancement of the experiments, and as years go on they will without question become more and more convincing and prove to the unbeliever the value of the institution. As an object lesson of merit it receives the highest praise from forestry students and experts, and as a property of value it meets the mind of the confident business man who can discern the distant aggregates. It is an example of doing things as against talking about doing them, and therefore appeals to good judgments.

The Board sincerely appreciates the great influence of the press in the educational formation of a right forestry sentiment, and urges that the same keen interest and devotion of the past be extended in the future. The various literary and civic federation clubs have added much to the increased interest and advancement of the forestry movement. To them also the Board expresses its esteem and urges them to greater achievements in the work of the civic principles, "cities beautiful," but warns them against radicalism as suggested in the discussion of needed legislation. Intelligence, fairness and equal rights to all interested should characterize every step taken in the advancement of the cause of forestry.

The "farmers' institute," that grand organization for the promotion of agricultural interests, should do more to influence the forestry cause than it is. By reason of the plan and manner in which it is organized and conducted, it could be made a factor equal to the public press in the formation of a right forestry sentiment and the Board suggests that it do more toward advancing this worthy cause.

BOARD OF FORESTRY.

Financial Statement

November 1, 1906, to September 30, 1907.

Appropriations to November 1, 1907, by Acts General Assembly, 1905—

1. Office—

Salary of Secretary of Board.....	\$1,800 00
Salary of stenographer of Secretary.....	600 00
Salary of four Board members	400 00
Mileage of four Board members	94 76
General expenses	1,000 00

Total \$3,894 76

2. Forest Reservation and Experimental Station \$3,000 00

3. Specific—Improvements—

Forest cultivation	1,800 00
Field planting	720 00
Field cultivation	900 00
Building N. W.....	450 00
Building S. C.....	550 00

Appropriations by General Assembly 1907 and available by
emergency—

Specific—Improvements N. E..... 1,200 00

Total specific \$5,620 00

Total of all appropriations \$12,514 76

EXPENDITURES.

Office—Salaries:

W. H. Freeman, Secretary of Board	\$1,650 00
Amy Stoops, stenographer to Secretary	550 00
Finley C. Carson, Board member	91 67
Finley C. Carson, Board member, mileage	45 80
Stanley Coulter, Board member	91 67
Stanley Coulter, Board member, mileage	12 72
Larkin M. Stultz, Board member	91 67
Larkin M. Stultz, Board member, mileage	16 76
Samuel Burkholder, Board member	91 67
Samuel Burkholder, Board member, mileage	19 48

Total \$2,661 44

Office—General Expenses:

Mileage	\$190 60
Postage	260 00
Field work	175 00
Telephone tolls and rents	87 75
Expressage	11 28
Livery hire	93 55
Office supplies	20 50
Hotel expenses	78 20

Total	\$916 88
Overdraft, remitted to Treasurer	21

Reservation and Experimental Station Expense Fund—

Management	\$723 09
Labor	1,982 97
Equipment	175 63

Total	\$2,881 69
Improvements—Specific	4,673 48

Total of all expenditures	\$11,133 49
Balance unexpended	1,381 27

Total	\$12,514 76
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Receipts from Forest Reservation and Experimental Station and remitted to State Treasurer upon recommendation of State Auditor—

Sale of fuel	\$1,096 95
Sale of lumber	29 33
Sale of cross ties	159 69
Sale of shingle blocks	3 25
Sale of hoop poles	7 50
Field rents	45 85
Labor by team hauling	2 00

Total	\$1,344 57
-------------	------------

Office Report and Suggestions

The work which the Board has attempted to advance in forestry from the office the past year has been along the same lines as of former attempts. The efforts were directed toward stimulating systematic work throughout the agricultural communities by the establishment of permanent woodlots upon each farm, the increasing of interest in commercial plantings of large areas upon the cheap, non-agricultural lands, Arbor Day and general ornamental tree plantings, fencing posts and cross-tie plantings, timber and tree diseases and affections, and advice as to the best economic disposition of merchantable timber.

In results each and all the features attempted to advance, as well as the general inquiry and correspondence, show a far better intelligence and thought than were evident of previous years. Everything indicates a rational appreciation of the subject, its necessity and a desire to aid the cause by the best people.

The field work conducted by the office the past summer, with the aid of the forestry students, Fred A. Miller of Purdue University, and E. E. Davis of Wabash College, was of two distinct classes. Mr. Miller's work is shown by the report which he rendered the office and published herewith. The report contains full explanations and will not be discussed here. The work of Mr. Davis was confined to taking statistics of forest growth upon the experimental plats at the Forest Reservation and Experimental Station, to get before the readers some facts for consideration.

Both of these gentlemen are students of forestry and their services were most valuable for the brief time they were employed. The only regret is that means will not permit of constant work along these lines throughout the State and for the entire year. Such work is of the most practical value to everyone interested, whether producers or consumers.

The office feels that it is time now to begin more of the scientific features and investigations and in the future it shall do so. In the past almost all the efforts have been directed toward the promotion of tree planting and cultivating woodlots as above enumerated. It does not mean, however, to cease its efforts in these directions, but to continue them at a greater effort and add thereto the science features.

Throughout the work of inquiry, correspondence and lecture work the aim has been to show that forestry has for its foundation the industrial welfare to as great or greater extent than any other feature of general interest now before the public mind. There is not an issue of any publication for general public reading but what is more or less filled with articles treating of some of the phases of forestry and their bearing upon some vital public interest. There is no one question of public interest more fully discussed and collaborated.

The Board fully appreciates that forestry advancement in Indiana can only be a successful accomplishment by the thorough education and the formation of a new mind. For more than a hundred years in Indiana the minds of the people have been directed toward removing the forests from the land in order to devote the soil to intense agricultural pursuits. The forestry movement is the natural outgrowth of the too persistent effort to clear the land for agricultural purposes, with no thought of a future consequence. Before a successful forestry movement can be established a new mind must be formed. There must be a facing about and a marching in the opposite direction. This can only be accomplished by the education of the generations to the realization of such facts. It will take time to do it. All the efforts, therefore, of the Board are directed to accomplish this aim. Legislation and guardianship can be but elementray factors to this end.

The number of inspections and recommendations made from the office the past year were greater in number than of any former year and were of a better grade, being mostly for farm woodlots. The requests for advice for fencing post plantings continue to be sought extensively, and indicate that *Catalpa Speciosa* and Black Locust for consideration in planting are equally valued. The sales reported by nurserymen indicate that throughout the State these trees are being planted in large numbers.

As stated in last year's report, a closer systematic organization of the work by counties is necessary for the better doing of the work. The Secretary, in addition to the office work, is superintendent of the work of experiments at the Forest Reservation, and cannot do as close work in the counties as is needed. An assistant for such work must be secured. Much good work is done, but advice is by correspondence instead of personal visits, and frequently not all the facts are known and the best results are not reached in the community.

The Board feels, however, that actual facts for data from things

done at the Reservation will go further as evidence and will be of more value in the future to stimulate forestry than anything else, and it so directed its efforts there the past year, and it trusts the future results will bear out the policy. No other current topic before the people is as much discussed and written upon as forestry. It is a subject also having less intelligent criticisms but as many isms of aerial magnitude as any, and it behooves seekers of wisdom and truth to be cautious as to the plans and policies adopted in their forestry conduct. No State in the Union has produced a better quality and quantity of hardwoods than Indiana. Her lumber and the finished products from the same have at all times been upon the pinnacle of commercial value. The past is the best guide to the future. What Indiana has produced she can reproduce, and every evidence goes to show that Indiana's soil will naturally produce trees if only encouraged to do so, and that its tendencies are to reforest with the valuable hardwoods most abundantly. In view of all these facts the Board suggests to those desiring to grow trees to stick to our native kinds and turn a deaf ear to experimental trees, unnatural and unacclimated to our State conditions, until fully satisfied, after diligent inquiry, that they will give good results, and the evidence can be shown.

LETTER OF TRANSMITTAL.

INDIANAPOLIS, IND., September 7, 1907.

Indiana State Board of Forestry:

Honorable Sirs—I have the honor to submit herewith, subject to your approval, a report compiled during the months of July, August and September of the present year, upon "Various Forest Conditions," as studied throughout the State of Indiana. The drawings and photographs accompanying same are deemed necessary to the better understanding of the report.

The time spent under salary was the months of July, August and the first week of September; seven weeks of which were consumed in actual field investigations, and three weeks in preparing drawings and compiling complete report.

The total territory investigated consisted of nine counties, located in northern, central and southern Indiana, respectively, as follows: Starke, Marshall and Kosciusko; Clinton, Howard and Grant; Orange, Martin and Washington.

Two weeks were spent in each of the above named localities, or on an average of four days in each county. This was indeed a

short period of time in which to cover a county with any degree of thoroughness, and in fact, it could not be done. Many times the progress of the work was exceedingly slow and retarded by the many and varied conditions presenting themselves, where the report had to include such a wide range of observations. The remaining week of field operations was devoted to obtaining photographs of private forest plantings in the regions surrounding Fort Wayne and South Bend.

I wish to express my appreciation of the favors shown me by your Secretary, W. H. Freeman, and also to say that the work now being carried on, not only upon the Reservation but throughout various parts of the State, cannot be too highly commended, or too strongly encouraged.

I would beg to be corrected for any statement contained herein to which you may object.

Respectfully,

FRED A. MILLER.

INTRODUCTION.

The contents of this report will be found under two distinct and separate heads: (1) Insect Pests of Indiana Timbers and Timber Trees; and (2) Growth and Development of the Oaks, Hickories and Ash, as Influenced by Soils and Other Important Ecological Factors.

The need of the investigations included under the first head was suggested by the ever-increasing demand for structural timbers and timbers used in many of our leading industries. That the supply of such stock is daily decreasing is acknowledged by all; and in this early stage of the forest policy, everything possible is being done by both national and state governments that this condition may not long continue. Special attention is being given to a determination of the most suitable localities for forest plantings, in order that this end may be most surely and quickly attained.

Natural reproduction and development are essential to the success of such plantings, and localities must be well chosen, that growth may be most rapid and vigorous. See figure 30 for results of a poorly chosen locality on which to plant black walnut. The spoke factories of our southern counties present one of the most glaring examples of the serious condition of one of our most valuable native trees. Already these manufacturers are anxiously discussing the possibilities of the next "cut" of second growth hickory, with which their mills must be constantly supplied. Natural reproduction by the hickory, especially the shellbark, is known to be

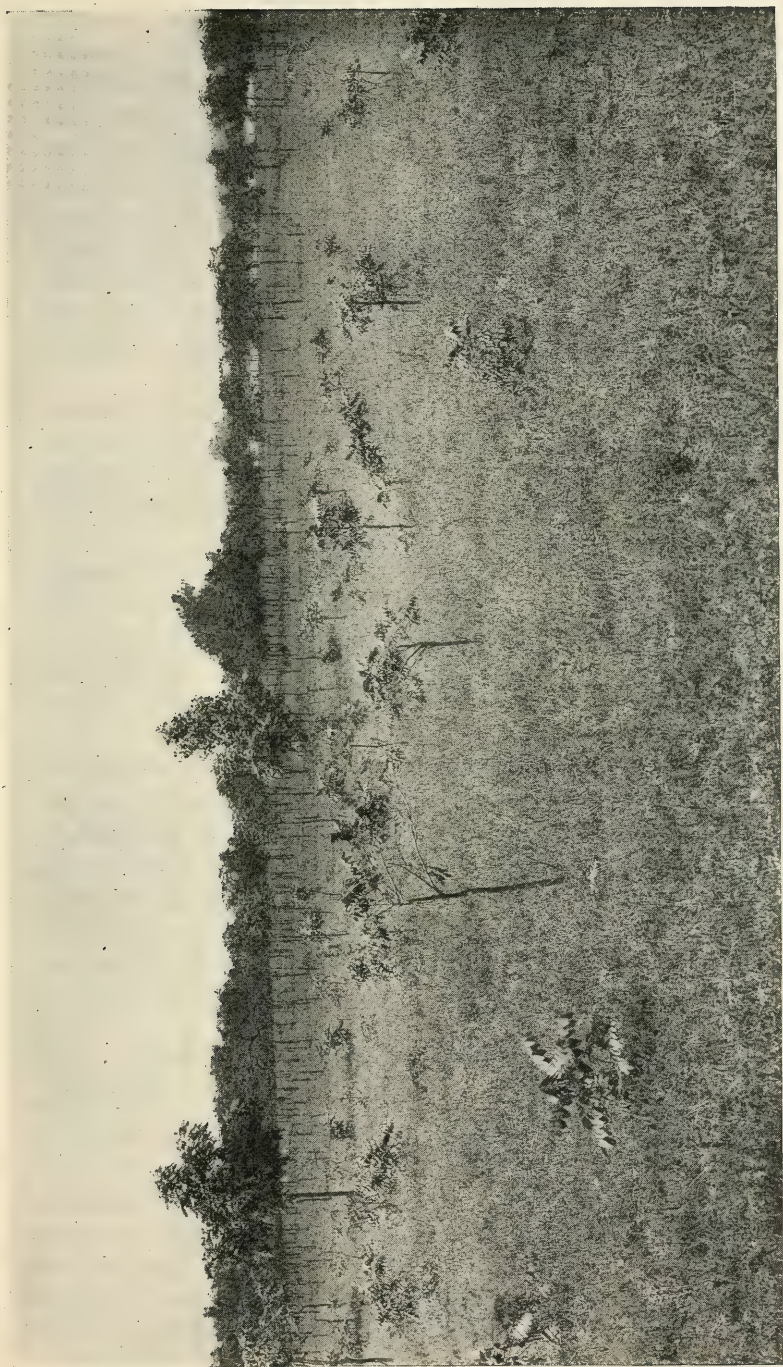


Fig. 30. A more general view of same planting as shown in Figs. 28 and 29. A more striking example of unevenness in growth and almost complete failure from soil conditions could not be obtained.

exceedingly slow, and the supply will continue to fall short of meeting the local demand, unless present conditions are immediately altered. Extensive plantings and conservative cutting of the present stand seem to be the only presentable solution. The many acres of absolutely waste and otherwise worthless land of southern Indiana are the most ideal and in every way the most suitable places for such undertakings. But that such plantings should succeed to the best possible degree, keen discrimination must be made in the selection of suitable localities with regard to soil conditions and other modifying elements. The owners of these waste lands must be appealed to and in some way influenced to such a degree that problems of this kind will be undertaken by them.

The contents of this section of the report consists of a setting forth of facts of a general nature, and in language readily interpreted by the layman, which should in part enable him to keep his waste land covered with the most rapidly growing and most profitable species of our valuable forest trees.

The first part of the report, "Insect Pests of Indiana Timbers and Timber Trees," was suggested by the ravages of many wood-destroying insects, upon our forest trees, some of which are active for a considerable time during each succeeding year, and others of which only make their appearance at irregular periods, leaving their destructive work as the only evidence of their existence.

Recent investigations have shown that oaks, chestnut, hickories, maples, birches, walnuts, cherry, poplar, gums and other of our principal hardwood, or broad-leaved, timber trees are damaged to a far greater extent than is realized by the casual observer. A large percentage of the hardwood timber in nearly all of the States east of the Rocky Mountains is affected, and the United States Forest Service states that the average annual losses from this source could be safely estimated at between fifteen and twenty million dollars.

Insects not only cause a direct loss to the owners of forests, manufacturers and consumers of forest products, but by their continued depredation constantly and surely contribute to the rapid depletion of all hardwood timber forests of the country.

INSECT INJURIES TO FOREST TREES OF INDIANA.

The primary objects of this investigation were (1) to determine the comparative extent of injury to native trees and some of their products and the kinds of insects causing such injury (2) to determine, when possible, some practical method by which to prevent to some degree the annual losses of valuable timber, from this cause.

It is aimed in this report to give a short and concise account of the results of the investigation with recommendations of such methods of prevention or control as seem of a practical nature.

THE CHARACTER OF INSECT INJURIES TO FOREST TREES.

The character of insect injury to forest trees may be treated under two distinct heads:

(1) Injuries which cause the death of trees.

(2) Injuries found in the solid wood which do not immediately result in the death of the trees, but cause serious defects in the parts of the tree, which furnish materials for commercial products.

There is also considerable loss experienced from insect injuries to felled trees, saw logs, ties, posts and many other crude products, which will be discussed briefly.

KNOWLEDGE NECESSARY TO PREVENTION OF LOSSES.

In dealing with insects, the methods which always produce the best possible results are those which relate to preventing attacks. Before preventive methods can be applied, however, a complete knowledge of the insects causing the injury, as well as the conditions most attractive to them, is absolutely necessary.

Insects in general have two objects in their attack; one is to obtain food, the other is to prepare for the development of their broods. Different species have special periods during the season of greatest activity when the adults are on the wing searching for suitable places in which to deposit their eggs. Some species fly in April and attack only recently felled pine trees. They are not attracted to any other kind of timber, because they cannot live in the bark or wood of any other tree, and only in such pines as are in the proper condition for hatching their eggs, and favoring the development of their young. There are also forms which attack only oak trees; others infest only hickory, and so on for many classes of trees.

Each of these forms possesses different habits, and has different periods of flight, and requires special conditions of the bark and

wood for its development. Some have but one generation in a year, others have two or more, while some require more than one year for the development of a single generation. Some species deposit their eggs in the bark or wood of trees soon after they are felled; others are attracted only to dead bark or wood of trees which have been felled or deadened for several months. Other variations in season and special conditions are noted, and it is easily seen how important it is to have a knowledge of such of the foregoing facts as is possible in order to meet the requirements necessary for preventing losses.

INJURIES WHICH CAUSE THE DEATH OF THE TREE.

The most important insects which cause the death of forest trees of the broad-leaved type are those which burrow through and beneath the living bark of the tree. There are two distinct classes of these injuries, one caused by the bark-boring beetles, the other by bark-boring larvae or grubs. The adults of this class of insects bore into and beneath the bark for the purpose of excavating galleries in which to deposit their eggs. These galleries are the primary injury which weakens to some extent the vitality of the tree, while the secondary or larval mines (see Fig. 1) complete the

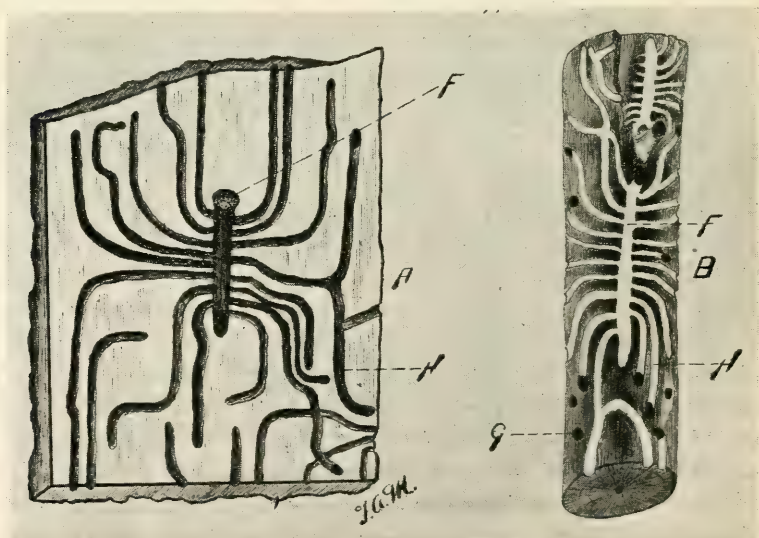


Fig. 1. Work of the Hickory Bark-Beetle: A, inner surface of piece of bark taken from dead tree; B, section of dead limb; F, primary gallery; H, larval mines; G, exit holes from which broods of the Bark-Beetle have emerged. Drawings from specimens collected three miles northeast of Marion, Grant County, Indiana.

girdling process which completely deadens the tree. The injuries from bark-boring grubs are the work of larvae which hatch from eggs deposited by the adult insect in the outer dead bark, and never in burrows beneath it. Therefore, the burrows made by the young larvae through the living inner bark, in search of food, not only cause the primary injury, but also complete the deadening process.

INJURY TO HICKORY TREES BY BARK-BEETLES.

Considerable attention has been directed to this form within recent years on account of the many dying hickory trees. This has been especially true in the northern and central States. The trouble has been reported and the damage found to be extremely noticeable as far south as central Georgia and westward to Missouri. Thousands of scattered trees have died, and in some sections nearly all of those in forests, parks and farm woodlots have either perished or been seriously injured. This injury is causing a great loss, not only of a valuable timber tree, but of shade trees, and especially is it causing a rapid decrease in the crop of nuts, which latter, in some sections of the country, are of considerable importance. This importance extends not only to the commercial product and home consumption, but also influences the natural reproduction of this form and so to a degree determines the future state of our hardwood forests. The dying of the hickory trees has been found in nearly every case investigated and reported upon, to be the direct result of injuries to the buds and twigs and to the bark of the branches and trunks by the bark-beetle (*Scolytus 4 spinosus*).

THE HICKORY BARK-BEETLE.

The hickory bark-beetle, or engraver beetle, is a short, shining black or reddish brown beetle, averaging about .14 of an inch in length. The wing covers are short and project over the abdomen, which in the male is excavated beneath and armed with four somewhat prominent spines, which suggest its technical name. It flies about from May to August and generally begins its attacks on the living trees at the base of the buds and leaves. Injuries of this nature were noted in two localities in northern Indiana during the latter part of July. Many twigs had been injured just back of the terminal bud, and as a consequence many of these buds were dead. Also many twigs and even small branches were showing the effect of this early attack. In another instance a small grove of second-growth hickory was examined where this same injury was interfer-

ing seriously with the development of the young trees. The injuries in both of the above-named cases were confined to the young and more tender parts of the trees, and at this early stage of the season were apparently a result of the insects' efforts to obtain food. Later they enter the bark of the larger branches and top of the trunks and begin excavating short longitudinal burrows (Fig. 1, F) in the inner bark and surface of the wood. The eggs, which are placed along the sides of these primary galleries, hatch into small white grubs or larvae, which burrow at right angles through the inner bark and groove the surface (Fig. 1, H) of the wood to some extent. The broods of larvae pass the winter in these brood galleries, and transform to the adults in the spring, in the outer portion of the inner bark. These adults emerge through holes bored through the outer bark (Fig. 1, G) to continue their work on the buds, branches and remainder of the trunks that were not killed by the first attack. In this locality they begin to emerge about the first of June and many individuals of the brood continue to emerge until late August. They may be found depositing eggs as late as September and are thus found attacking trees all through the summer.

The first evidence of an attack is generally shown by the leaves, some of which die and remain on the twigs, while others fall early. Late in July and especially in August, the large branches in the top of the tree begin to die and in some cases the entire tree is killed the first season. More often, however, the lower portion of the large tree does not die until subsequent attacks are made upon it. Upon removing the bark from some of these injured parts the characteristic brood galleries will be found in the inner bark and to some extent on the surface of the wood (Figs. 1 and 3). If the tree is infected, the parent beetle will be found in the primary longitudinal gallery, and many of the small, white grubs in the larval burrows in the bark. If the broods have emerged, the outer dead bark will be found perforated with numerous small round holes, as indicated in Fig. 1, G.

Damage from this destructive form was found to be most extensive in the central portion of the State. In Howard County, examples were found where trees ranging from 10 to 18 inches in diameter were in various stages of destruction from attacks by this form. The trunk of a dead but apparently sound tree was closely examined. The numerous exit holes of emerging broods aroused suspicion, and upon removing portions of the bark the cause of the tree's death was unmistakable. The inner bark was

reduced to a powdered condition by the brood galleries and extensive larval mines which extended entirely around the tree and as high up on the trunk as a man could reach.

The extent of the loss from this insect, in central and northern Indiana, is limited to a large degree by the scarcity of hickory. Should the form spread to southern counties, however, the loss would be considerable. Consequently, all possible means should be taken to confine the injury to the smallest possible territory and to keep it from entering the larger stands of hickory.

METHOD OF CONTROL.—A peculiarity in the life history of this form makes it a comparatively easy pest with which to deal. In this locality there is but a single generation annually, and the immature stage of the generation passes the winter in the bark of the infested trees. These are two facts which assure its easy destruction, since it is only necessary to determine the trees which are actually infested, at the beginning of winter and to be sure that these are all cut and the bark burned before the first of the following May. June was stated as the time when the brood emerges in this State, but this date varies considerably, according to conditions, and it would not be considered a safe plan to delay such treatment longer than the first of May. If the greater number of infested trees over a considerable area are thus treated, the number of insects will be so reduced that they cannot continue their destructive work on living trees. It must be remembered that nothing is to be gained by cutting and burning the dead trees after the broods have emerged, but that the greatest importance lies in locating all trees which have died within a year from May or June and are infested, and that these be cut and the insects destroyed before the following spring. In many cases it would be advisable, where only the top or side branches are attacked, and the remainder of the tree living, to cut out and destroy this part and thus save the more valuable portion of the tree. The broods can be destroyed without loss of the entire tree by utilizing suitable parts for fuel or other purposes, if consumed within the specified time. When the logs are still valuable, the bark can be removed and burned or the logs placed in water until the insects are dead.

The practical application of this method of cutting and burning the infested trees was made by the commissioner of parks of Detroit, Mich., in Belle Isle Park, May, 1903. Many hickory trees were infested, and indeed all were threatened with destruction by this insect. Upon request of the commissioner, investigations were made by A. D. Hopkins of the United States Department of Agri-

culture, who recommended that the infested trees be cut and burned before the broods of the beetle commenced to emerge. This plan was thoroughly carried out and no evidence of the destructive work of the insect on the remaining trees has since been observed.

BARK-BEETLE INJURIES TO OAK.

This form is very similar to the preceding in its habits and manner of attack. It is found infesting different kinds of oaks, ranging in size from a few inches in diameter to large trees. Upon removing the bark from an infested tree the inner surface is found to be grooved with a great number of very minute transverse burrows which are also faintly marked on the surface of the wood. This form is, *pityophthorus pruinus*, the beetle of which is exceedingly small. In early spring the emerging broods prefer to enter the bark of trees felled or injured by storms or other causes. If these conditions are lacking they will concentrate their attentions on a few living trees, which they soon reduce to a weakened condition.

This form was not encountered in any locality studied, but its wide distribution and the possibility of a periodic appearance justifies a brief discussion at this time.

The method of control is very similar to that employed for the hickory bark-beetle, only in this case a removal of the bark from infested parts in winter is sufficient to kill the broods. Often, however, it is easier to burn the branches and confine the removing of the bark to the trunks alone. A second generation is also possible with this insect, and trees which die early in the season should be cut and treated as above, as soon as the leaves commence to die. This will prevent the development and emerging of a possible second generation, before winter. Therefore, all that is necessary to prevent serious and extensive harm from this insect is clean forest management and prompt felling and removal of bark from dying trees.

BARK BEETLE INJURIES TO OTHER TREES.

Many forest trees, besides those mentioned, are injured by this class of insects. The great numbers of species, however, will limit their treatment, and only those forms found in the State which are of most economic importance will be considered.

Walnut was found in southern Indiana slightly injured by girdling forms. This was largely white walnut or butternut (*Juglans cinerea*), and the attack was generally confined to trees which had

been weakened by other agencies. The insects seemed to possess little power of gaining a foothold on healthful and sound trees. The galleries in this case (see Fig. 2) are not so characteristic of species as those on the hickory and oak. The engravings and ornamental transverse galleries are absent, and are replaced by larval mines radiating in a miscellaneous manner.



Fig. 2. Section of wood cut from a White Walnut (*Juglans cinerea*), which had been entirely girdled. The galleries are found in the cambium (inner bark), penetrating slightly into the sap wood, thus effectively deadening the tree. Drawing from specimen collected two miles east of Paoli, Orange County, Indiana.

The wild cherry (*Prunus serotina*) is sometimes seriously injured by the cherry bark-beetle (*Phloeophthorus liminaria*), but this insect, though capable of doing so, rarely attacks strong healthful trees. The ornamental double transverse gallery of this form in the inner bark and on the surface of the wood, is easily recognized by the characteristic form. This insect was not found in alarming numbers and loss from its attacks is, at this time, slight.

The hackberry bark-beetle (*Scolytus muticus*), the elm bark-beetle (*Hylastinus rufipes*), the mulberry bark-beetle (*Phloeophthorus frontalis*), the ash bark-beetle (*Meliobius aculeatus*), (see Fig. 3), and a number of others of this large class of beetles were noted, but, though they may sometimes be quite injurious, are more often secondary enemies which infest and damage only injured or weakened trees and prevent their immediate recovery.

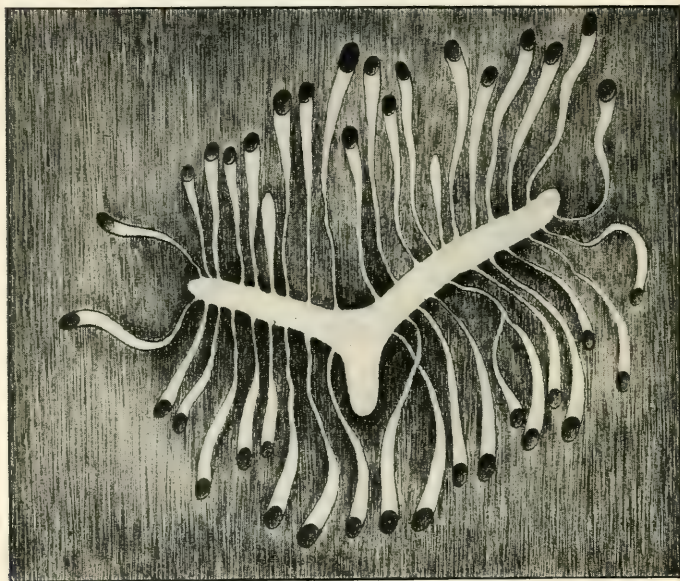


Fig. 3. Brood galleries of Ash Bark-Beetle in surface of Ash wood.
From Yearbook of Department of Agriculture for 1903.

BARK-BORING GRUBS OF OAKS, CHESTNUTS, BIRCHES AND POPLARS.

Much injury to the above-named forms has been reported from surrounding regions. Indeed, for a number of years losses have been experienced from boring grubs, but no such large bodies of timber have been killed in any one year as to excite special attention. Individual trees, however, die throughout the forests every year and contribute to the annual losses. At different periods in some of the southern States chestnuts and oaks scattered over extended areas have died in alarming numbers.

Upon investigation made in different sections it was found that the oak-destroying bark-borer, or two-lined chestnut borer (*Agri-*

lus bilineatus), was directly associated with the cause of this wide destruction of trees.

The adult of this ravaging enemy is a slender blue-black beetle, with a faint yellow line along the middle of each wing cover. The larva is a long, slender, flat-headed grub, which, upon hatching from the egg deposited in the outer bark, burrows into the inner bark, through which it eats long zigzag mines. When this insect occurs in great numbers in a tree, the inner bark is killed and the tree readily dies. The insect passes the winter in the larval stage in the outer portion of the inner bark, where in the spring it transforms to the adult. The beetles begin to emerge in May and June. They deposit their eggs in the outer bark of living trees, or stumps of recently felled trees, oak and chestnut, or in other places where lightning and fire have made inroads for them. They are often found breeding in countless numbers in the bark of stumps, and in this manner are enabled to increase in such rapidly multiplying numbers as to enable them to attack and kill living trees.

This is a form which should be closely guarded against in Indiana forests. Especially in the southern counties where oak and chestnut abound. At present it is not doing noticeable damage to live, healthful trees, but the conditions existing in many wooded tracts visited by the writer suggest the possibility of an attack by this insect. Many scattered chestnuts which have long passed the age of maturity and are consequently decreasing in value are rapidly becoming breeding places for many such destructive forms. Not only chestnut but many other forms such as oaks, beech and maple are found in a similar condition.

METHOD OF CONTROL.—The following method of control is taken from a report of the United States Forest Service: "There is evidently only a single generation of this insect annually, and this fact, together with its habit of breeding in the bark of stumps and injured trees, and in those killed by it, with its habit of transforming in the outer bark, suggests a practical method of control. All infested stumps and dying and recently dead trees should be located before the beginning of winter, or by the first of November, in order that the infested bark may be removed from the trunks and stumps and burned before the first of April."

"Trees struck by lightning in May and June furnish favorable conditions for the multiplication and destructive ravages of the two-lined chestnut borer; therefore, all such trees, together with those dying from insect attack, should be felled during the summer or the winter following, and the bark removed and burned. Very

often such trees can be utilized for fuel, so that nothing is lost in the operation."

The cottonwoods, birches, yellow poplar and aspens are often killed or seriously injured by various species of *Agrillus*, which have habits very similar to and many times identical with, the above described species, and therefore require the same treatment.

The work of these insects was noted throughout the State on yellow poplar, cottonwood and some of the oaks, but in no case were they present in dangerous numbers. The curious embossed effect noted on the surface of wood which has been infested by one of these bark-boring insects is the result of healed-over grooves made by larvae in the outer layers of wood beneath the bark. These wounds were made when the tree was in a healthful and growing condition and furnish conclusive evidence that the tree was attacked while living. The burrows are long and winding and suggest the ease with which trees are girdled and killed when thickly infested.

LOCUST BORER. (*Cyllene Robiniae*.)

The economic importance of this widely-known insect as affecting the growth of the black or yellow locust (*Robinia pseudacacia*), is realized by everyone who is interested in this valuable tree. Private plantings as well as natural growths have been utterly destroyed or injured to such an extent that urgent need of all available information concerning the nature of its work is plainly evident.

CHARACTER OF THE INSECT AND ITS WORK.

The borer is a whitish, elongate, so-called "round-headed" grub or larva (Fig. 4, D), which hatches from an egg deposited by a black or brown and yellow-striped long-headed winged beetle (Fig. 4, C), found on the trees and on the flowers of golden-rod from August to October. The eggs are deposited in the crevices of the bark of living trees from August to October, and on hatching the young borers mine into the outer portion of the living inner bark, where they pass the winter. In the spring they bore through the bark into the sapwood and heartwood. Here they transform in July and August to pupae and in August and September to adult beetles. These beetles soon emerge from the trees and deposit eggs for the next generation of borers and beetles.

The injury to the trees (Fig. 4, A and B) consists of wounds in the bark and sapwood which, if sufficiently severe or repeated year after year, result in either a stunted growth, or the death of the

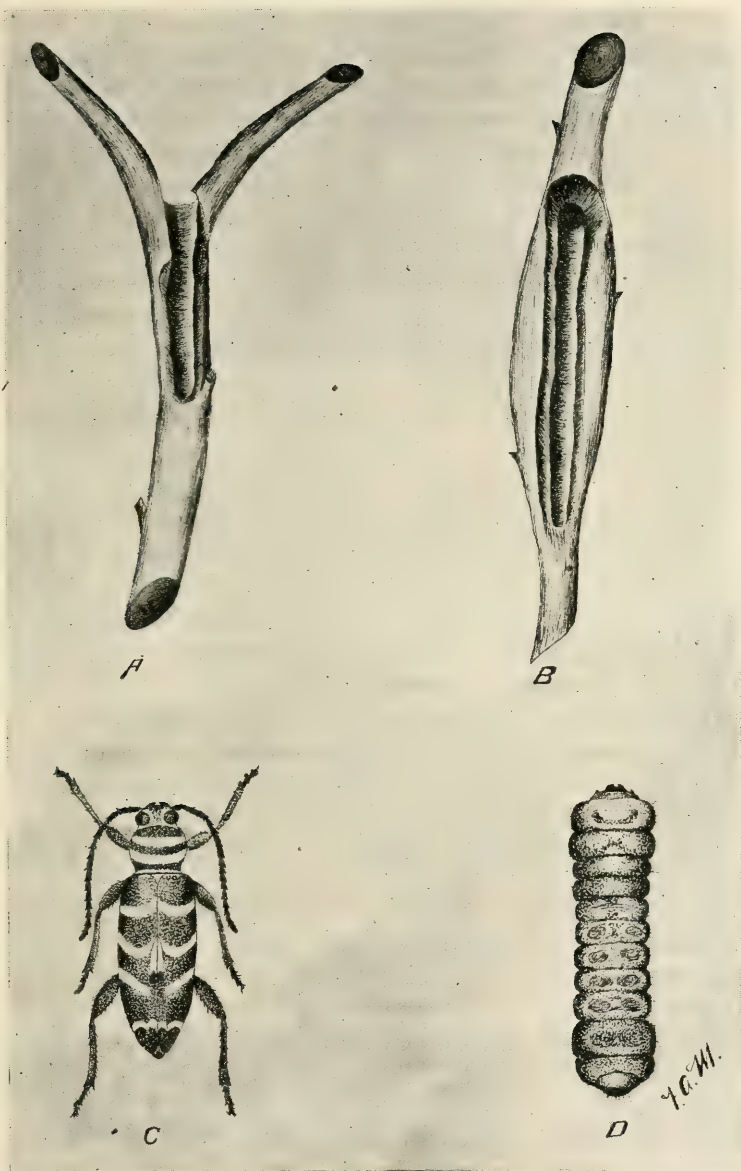


Fig. 4. Work of the Locust Borer: A, section of the main stem of a young tree, showing length of burrow in which a larva developed and transformed to the adult beetle; B, section of a branch showing enlargement at point of injury; C, male beetle; D, larvae, dorsal view. Drawings from specimens collected six miles west of Ft. Wayne, on the farm of J. H. Gerding. For photograph of planting from which specimens were taken, see Fig. 25, p. 74.

young and old trees. The numerous worm holes in the wood also reduce its commercial value or render it absolutely worthless.

The presence of the insect in injurious numbers is indicated by the frequency of the beetles on the golden-rod flowers and on the locust trees, from August to October; by the slight flow of sap and by the borings where the young larvae are at work in the bark during April and May; by the whitish sawdust borings lodged in the rough bark, and on the ground around the base of the trunk during May, June and July, and by the breaking down of the branches and young trees and by the sickly appearance of the young tender twigs and leaves in July and August.

OCCURRENCE AND EXTENT OF DAMAGE.

The insect was found in each of the nine counties mentioned in this report, and in most cases the damage from its attacks was considered injurious. It was found on both young and old trees, and so extensive was the damage to natural growths, artificial plantings, and shade trees, that in some sections, and, indeed, over the greater part of the State, it is considered unprofitable to grow the tree for shade or timber. Often in such sections the natural sprout growth is considered a pest rather than otherwise.

The loss resulting from defective timber, stunted growth, and the death of trees was found to be considerable, and could be represented by the difference in value between the damaged growth or product and the same if uninjured and healthy. It is readily seen that this, if expressed in dollars, would amount to a large sum.

METHOD OF CONTROL.—The following suggestions have been taken from various authorities and are thought to be of practical value in the control of this insect in both artificial plantings and natural growths.

The fact that the young larvae from eggs deposited during summer remain in the outer bark during the winter and do not enter the wood until the following May, suggests that if locust trees known to be infested were cut between November and May, the bark removed from that portion which is of value, and the remainder burned, it would destroy vast numbers of the insects and aid greatly in protecting the remaining trees. The infested trees may be easily detected during May, June and July by the ejected sap and borings. These trees, being once located, should be cut close to the ground and burned, before the first of August, to de-

stroy the borers before they transform to the adult beetles and emerge. The same end may be accomplished by burning the tops and worthless parts and by submerging the valuable parts in water until the borers are killed.

CEDAR BARK-BEETLE.

The cedar bark-beetle, or engraver beetle, was found in limited numbers on the red cedars of southern Indiana. The injury, so far as noted, was confined to dead or felled trees, posts which had been left in the woods, and branches of straggling young trees. In other localities outside the State this form has often done considerable damage, and is to be looked upon with suspicion, even with our limited growth of cedar.

The character of the injury is shown in Fig. 5, the specimen being taken from an infested tree near Salem, Washington county, Indiana. The specimen was collected in July and the adult beetles were found emerging at this time. The life history and methods of attack are very similar to the other bark-beetles described and will not be discussed in detail.

INJURIES TO THE WOOD WHICH DO NOT RESULT IN THE DEATH OF THE TREE.

The wood of living trees is often so injured as to not materially affect the life of the trees but to cause an enormous loss of the best hardwood timbers. This class of injuries is generally known as pinholes and wormholes. The work of these timber worms is said by some authorities to be causing greater loss than that resulting from the work of the bark-borers already mentioned. Trees attacked by the bark-borers are conspicuous and thus attract attention, while those infested by wood-borers are seldom noticed. Indeed, the damage is scarcely perceptible until the trees are closely examined or felled. There may, in fact, be hundreds of generations of this type of insects breed in and emerge from a tree during its life. The heartwood is thus rendered absolutely worthless for commercial purposes, yet the tree may continue to live and show little or no outward signs of injury. The work of these timber worms is distinguished from that of the timber beetles by the greater variation in the size of holes in the same piece of wood; also by the fact that these borings are not branched from a single entrance or gallery, as are those made by the beetles.

PINHOLE INJURIES IN OAK.

When once established in large numbers this is one of the most destructive classes of enemies of hardwood trees. The oak timberworm (*Eupsolis minuta*) is the best representative of the class. This is a slender whitish worm, full grown specimens of which are less than an inch long and one-sixteenth of an inch or less in diameter toward the middle of the body, while the segments toward the head are enlarged to twice this diameter. The adult is a slender, reddish snout-beetle, with black markings, varying in length from four to six-tenths of an inch. The beetles appear on the wing in April and May, and are found through the spring and summer months on or near fresh or old wounds on living trees. They deposit their eggs in the surface and edges of these injured

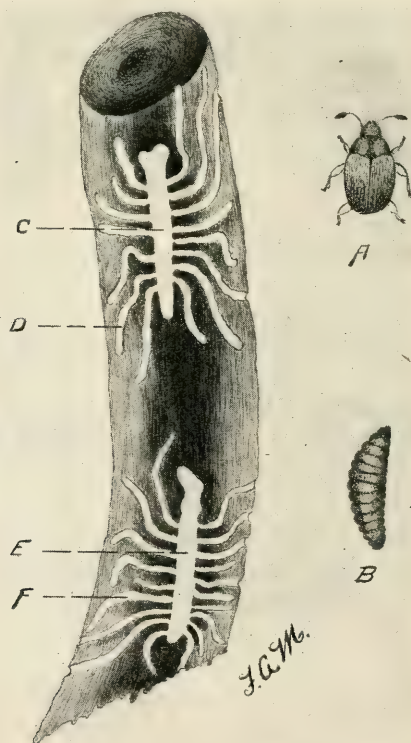


Fig. 5. Work of Pine Beetle on branch of Red Cedar: A, adult beetle; B, larva; C and E, primary galleries; D and F, larval mines made by the newly hatched larvae. Drawings from specimens collected three miles west of Salem, Washington County, Indiana. Collections made July 12, 1907.

places and the minute larvae bore, at first, almost invisible holes directly into the wood. These larvae enlarge and extend these burrows in all directions through the heartwood until they have attained their full growth. Then, while yet within their burrows, they transform to adults, to emerge the next spring or summer and repeat the process in the same wound, or in the wood of dead standing trees and the stumps and logs of felled ones. Thus, an ax wound in the side of a large sound tree may result in an attack by this insect. This form breeds in great numbers in the trunks of old dead trees and in the stumps of logs and felled ones, and is ever ready to attack living trees whenever slight wounds in the bark or wood offer an opportunity. It will also attack freshly split stave bolts, and although no present evidence of such attack was encountered, records were obtained at Frankfort, Indiana, of a serious attack which occurred near this place a few years previous. The injury appeared in stave bolts cut from white oak (*quercus alba*) and approximately twenty-five per cent. or more of this timber over a considerable area was rendered absolutely worthless for this purpose. Actual figures as to the amount of lumber damaged could not be obtained but after close investigations the above estimate is known to be sufficiently low. Injury from this source, is at the present time, apparently slight, since the many saw mills and cut over areas inspected gave but little evidence of its presence.

INJURIES BY THE CARPENTER-WORM.

The presence of this insect is determined by the very large oblong worm holes so common in the heartwood of various oaks, and also in that of the yellow locust. The form is (*Prionoxystus robiniae*) the larvae of which are large white and pink caterpillars, which hatch from eggs deposited by stout, short-winged, gray moths. The caterpillars are quite large and holes made by them are sometimes one and one-half inches in diameter one way by three-fourths of an inch the other. This form with other large wood-boring grubs or beetles, many times infest the top part of the trunk and large branches of oak trees, and cause what are called "stag-horn" tops. This injury subsequently results in a broken, decayed and otherwise worthless tree. In passing through any timber tract the numerous "stag-horn" tops of the oldest oak trees give strong evidence of the destructive work of these heartwood borers. Loss from this source was found more frequently in southern Indiana, where the number of over-mature trees is most abundant.

METHOD OF CONTROL.—The only method so far suggested for preventing the continued attacks of this insect is to fell and utilize all mature timber that shows any indication of a deceased or otherwise weakened condition of the tops, and to clean up and burn any parts showing evidence of being infested.

THE OAK CARPENTER-WORM.

Injury from this insect was found to be very common, and the loss, if closely estimated, would be large. Of the many lumber and log yards visited by the writer, but few were found where injury from this form was entirely absent. Upon investigation, this infested timber was found to have been felled early in the spring, much of it being cut after active movements of the sap had commenced, and then allowed to remain in the woods until late summer. This procedure insured ideal feeding and breeding places, for not only this special form, but for many others of similar habits. Red oak was most frequently injured, of all the infested forms. The insect was found over a wide area of the State and precautions should be taken to lessen the annual losses caused by its attacks. Much can be done in the way of proper seasonal cutting and more prompt attention to trees after they are once felled.

The attack of this insect does not stop at the lumber yard, and the "tight-stack" in which the newly sawed lumber is often allowed to remain for several days, or even weeks, should be discouraged. The point of attack of this insect being localized largely in the sap wood, thorough and rapid seasoning is the best means of control for sawed lumber. It is also advised to stack the lumber with the sap down. Many of these destructive forms cannot begin work from the under side of a supported plank, as in the "loose stack," and the method where employed has been found effective to a marked degree. This is due to the above stated fact, that these insects work largely in the sapwood, and upon the position of the plank depends largely the ease of attack.

WORM-HOLE INJURIES TO CHESTNUT WOOD.

One of the most common defects in our hardwood trees is found in the worm-holes and pin-holes in chestnut wood. No one having any dealings with this kind of wood can have failed to notice these injuries. The insects causing these worm holes are of such wide distribution that scarcely a chestnut tree of any size can be found

in the hardwood forests, the wood of which does not show more or less injury of this kind.

In this State the injury was confined largely to the old trees which had weakened through age or been injured by other agencies. The chestnut is not so abundant here as farther east and the work of the insect is naturally limited.

The chestnut timber worm (*Lymexylon sericeum*) is a yellowish-white, slender grub or larva about an inch long. It has a hoodlike enlargement just back of the head, and the opposite end of the body is armed with a horny gouge-like segment, with toothed edges. The adult is a dark-brown, elongate beetle densely covered with fine hairs. In length it varies from four to six-tenths of an inch. The habits of the insect are similar to those of the oak timber worm. It breeds in the wood of dead and down trees and infests wounds in the tissues of living ones. It may also enter healthful trees through knot holes or at the base of dead and broken limbs. Very little is as yet known of the life history of this form, except that the adults emerge about the time the chestnut is in bloom. It is said that the larvae probably live several years in the burrows before being transformed into the adult. This, it seems, would account for the scarcity of the insect in collections. The common occurrence of its work is explained by the fact that holes in the wood of old trees may represent the work of many generations covering as much as two or three centuries.

METHOD OF CONTROL.—The same methods used in combating the oak timber-worms are also applicable to this form. It is also advisable to cut out all old trees and encourage the development of young trees, which are much less liable to attack. These young trees should then be cut for poles or other lumber as soon as they have reached a marketable size.

INJURY TO SECOND-GROWTH HICKORY BY A WOOD-BORING LARVA.

Many examples of a wood-boring insect working on young healthful hickory trees, were found over extended territory. Specimens of the insect could not be obtained and its work is not characteristic enough to insure accurate classification. It places itself naturally, however, in this last class of insects which have been discussed as those not causing the immediate death of the tree. The nature of the injury is shown in Fig. 6. This insect cuts an opening as large as an ordinary lead pencil through the solid bark and wood into the center of the sapling. When the heart is

reached a considerable portion is eaten away, generally in a downward direction. This injury sometimes extends from eighteen to twenty inches from the transverse boring. The direct injury apparently stops at this stage, and the tree, but slightly effected or weakened by the attack soon heals over the opening and to all external appearances is in a perfectly healthful condition. Heart-

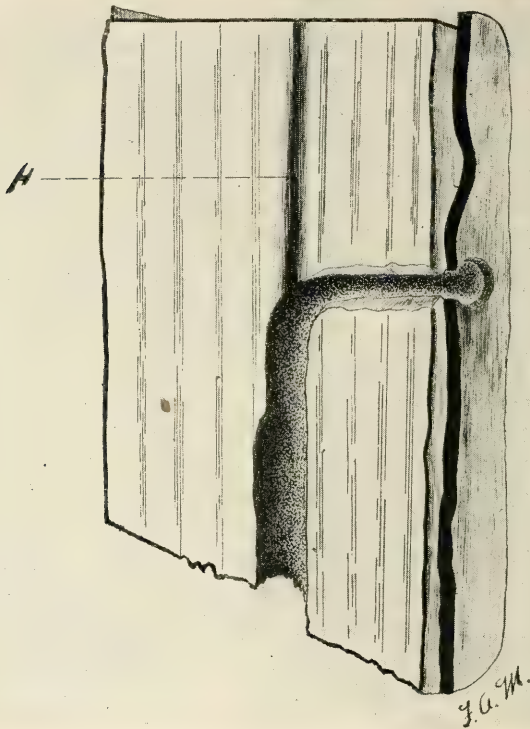


Fig. 6. Work of Borer on Hickory. Injury of this kind is found on young Hickory and, though not resulting in the immediate death of the tree, it causes the very destructive heart-rot so often found in the mature trees. A, heart-rot radiating from injury.

rot immediately begins, however, and continues during the life of the tree. A considerable portion of the tree is thus rendered worthless, and this condition often encountered in mature trees is possibly the result of an early attack by this insect. The life history of the form not being understood no method of prevention can be suggested at this time.

INJURIES TO FELLED TREES, SPOKE TIMBER, POSTS AND TIES; CHARACTER AND EXTENT OF INJURY.

The destructive work of insects which cause serious damage to commercial woods, nuts or even barks consists of burrows and galleries excavated by the young and mature forms of beetles and a few other kinds of insects. Spoke timber in the rough as well as other crude products are injured by pinhole and wormhole defects caused by these forms. Also seasoned rough and dressed lumber and even finished wood material is damaged by the so-called powder post borers, which convert the woody tissue into a mass of fine dust or powder. The annual loss from this source is enormous and far more extensive than is generally recognized. The loss differs from that resulting from insect damage to natural forest resources in that it represents more directly a loss of money invested in material and labor. The nature of the injury by these forms is shown in Fig. 7.

CHARACTER OF INSECT INJURY AS DISTINCTIVE OF SPECIES.

The work of the different kinds of insects as represented by injuries to forest products is the first thing to attract attention. The distinctive character of this work is easily observed, while the insect responsible for it is very seldom noticed. Even if detected it is so extremely difficult to determine by the general observer, from descriptions and illustrations, that the species is rarely recognized. The character of the work, however, is often sufficient in itself to identify the cause and in many cases suggest a remedy.

POWDER POST BORERS.

Various forms of insects under the general class of those injuring felled trees, spoke timber, etc., were encountered over wide areas within the State, and would require a special report, for complete discussion. For this reason only the most important forms will be taken up in this report.

The character work of the powder post beetles is shown in Fig. 7. The injury consists of closely placed burrows, generally packed with the borings in the wood of seasoned products, such as crude and finished handles, cooperage and wagon stock, and inside woodwork in old buildings. Often the wood is completely destroyed or reduced to a powdered condition. This is the work of both the adults and the young stages of some species, or of the larval stages alone of others. In the former, the adults deposit their eggs in

burrows or galleries excavated for the purpose, while in the latter, the eggs are deposited on or beneath the surface of the wood. The grubs complete the destruction by boring through the solid wood in all directions and packing their burrows with the powdered wood. When they are full grown they transform to the adult and emerge from the infested timber through round holes in the sur-

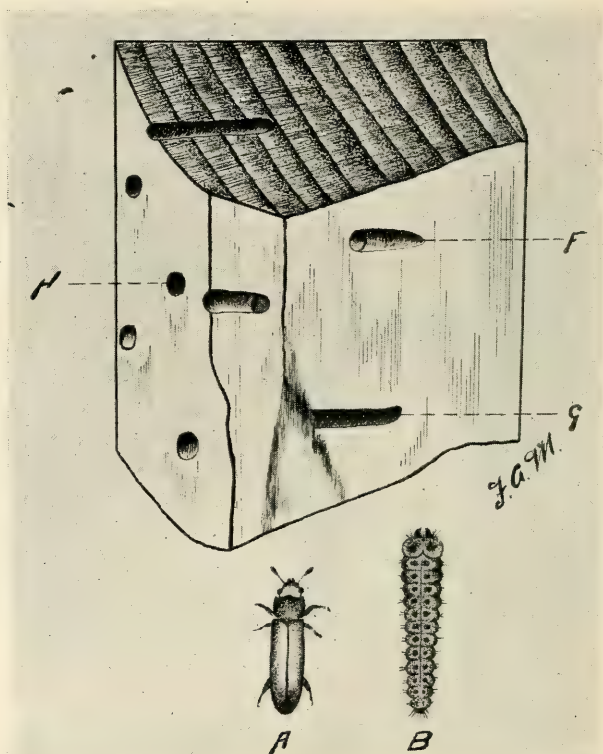


Fig. 7. Work of Powder Post Beetle (*Lyctus striatus*), in Hickory spoke timber: A, adult; B, larva; F and G, work of larvae; H, exit holes. Drawings from specimens collected at spoke factory, Paoli, Orange County, Indiana.

face. Some species continue to work in the same wood until many generations have developed, or until the wood is entirely destroyed and all available nutritive substance extracted.

This is the most destructive class of insects found in Indiana at the present time. The loss to the spoke manufacturers of southern Indiana is indeed considerable. Figure 7 shows a section cut from a rough hickory spoke and no explanation of the nature of the in-

jury is necessary. This specimen was taken from a pile of rough spokes where large numbers were similarly affected. The investigations were made in July and already emerging broods were noticed. It was found that most of the injured timber had been cut

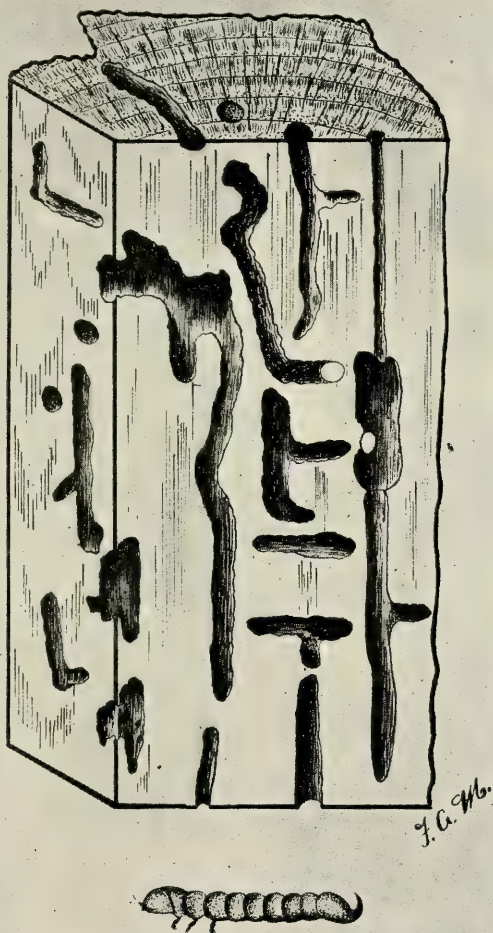


Fig. 8. Work of Timber Worms. Specimens taken from dead tree. The larva shown here is the Sapwood Timber Worm (*Hylocoetus lugubris*).

early in March or April and left in the woods until late summer. Many bolts were at that time so badly damaged that they were discarded and left in the woods. No effort had been made to burn or destroy them and they only served as additional breeding places

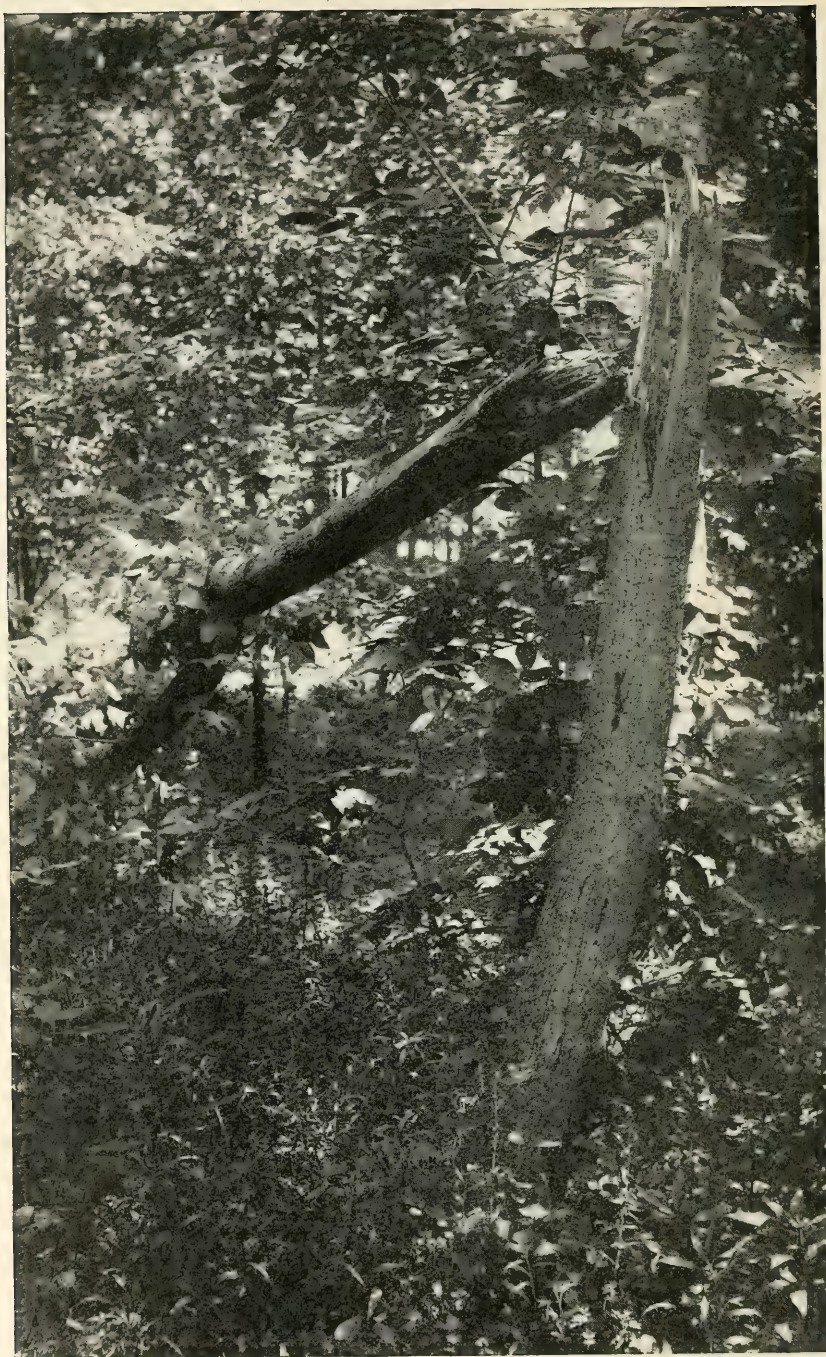


Fig. 9. Young Yellow Poplar so weakened by Timber Worms that it had been easily blown over by the wind.

for continuous generations. Old hickory tops were also examined, and without exception were found badly infested.

METHOD OF CONTROL.—The annual loss from early cuttings in the spring should be conclusive evidence against this method. Soon after being felled the hickory log is in excellent condition for attack from this powder post beetle. If transferred immediately to the mill and worked into the finished product, the chances for loss are lessened, but even then a brood of young insects may be transferred to the mill yard, only to continue its ravages among the seasoning bolts or rough spokes which are generally found there in large numbers. Burning of all infested stumps and limbs and care that no injured parts are allowed to enter the mill yard together with seasonable cutting, should do much to lessen the annual loss.

TIMBER WORMS IN SEASONING PRODUCTS.

Two classes of timber worms are easily and readily recognized. Those attacking living trees and those injuring only dead and felled ones, saw logs, posts and ties. These two classes are made up of numerous forms, which may be separated and distinguished to some degree, by the character of their work.

The nature of the work is shown in Figs. 8, 9, 10 and 11; Fig. 9 being a young poplar which was so weakened by borings that it had been blown over. The figures 10 and 11 were photographed from specimens collected at Knox, Starke County, Indiana. At this place an inspection was made of railroad ties and posts to determine the per cent. of each that was seriously affected by insect attack before being utilized by the railroad company. This inspection was made of surplus stock owned by the Nickle Plate road, and was considered by their section foreman as first grade. The ties and posts were yellow cedar, some of which had been purchased from the south, others from the north.

Out of 2,036 ties inspected, 37 per cent. were seriously affected at one end, as shown in Fig. 11. Out of 1,629 posts, 13 per cent. were badly damaged at the large end, as shown in Fig. 10. The ties cost the railroad company fifty-one cents apiece, and were estimated to last eleven years. Out of this comparatively small number of ties inspected the life of 753 was shortened at least three years. The life of the inspected posts would be shortened much more than that of the ties, since the injured part would come in more direct contact with the soil. These investigations, though not extensive, will furnish some idea of the unnecessary drain

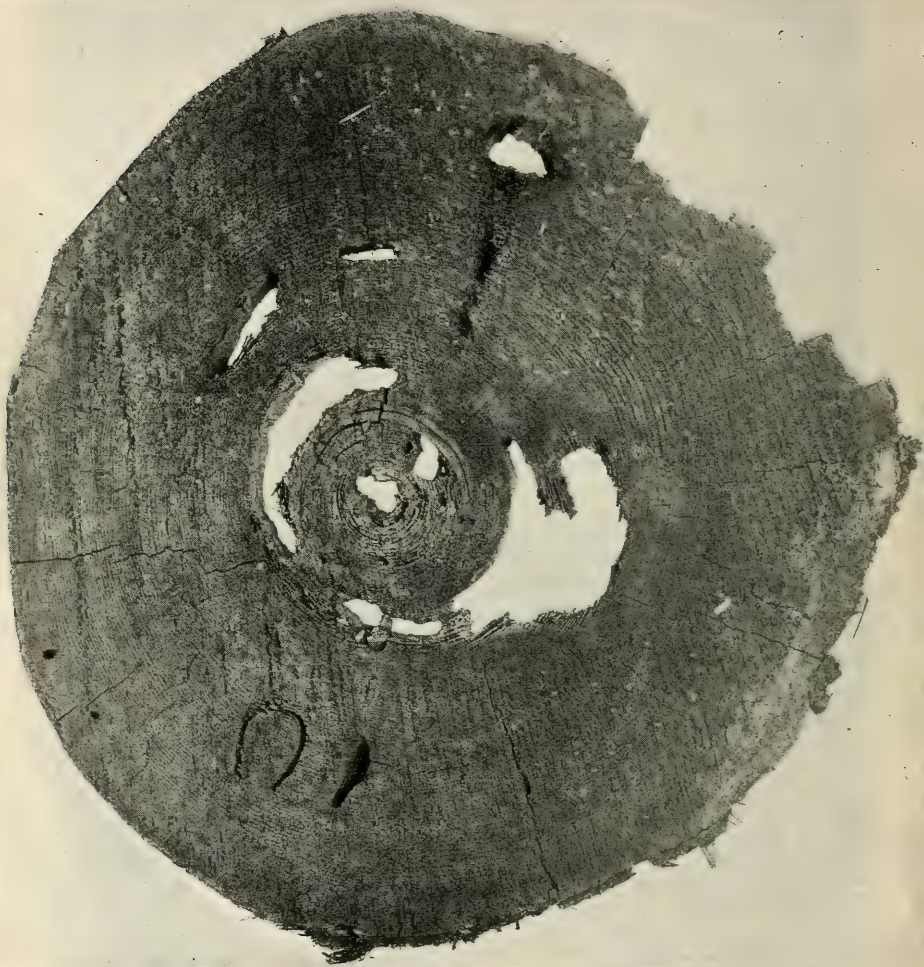


Fig. 10. Section of Yellow Cedar post injured by Timber Worms. Specimen collected from railroad stock at Knox, Indiana.

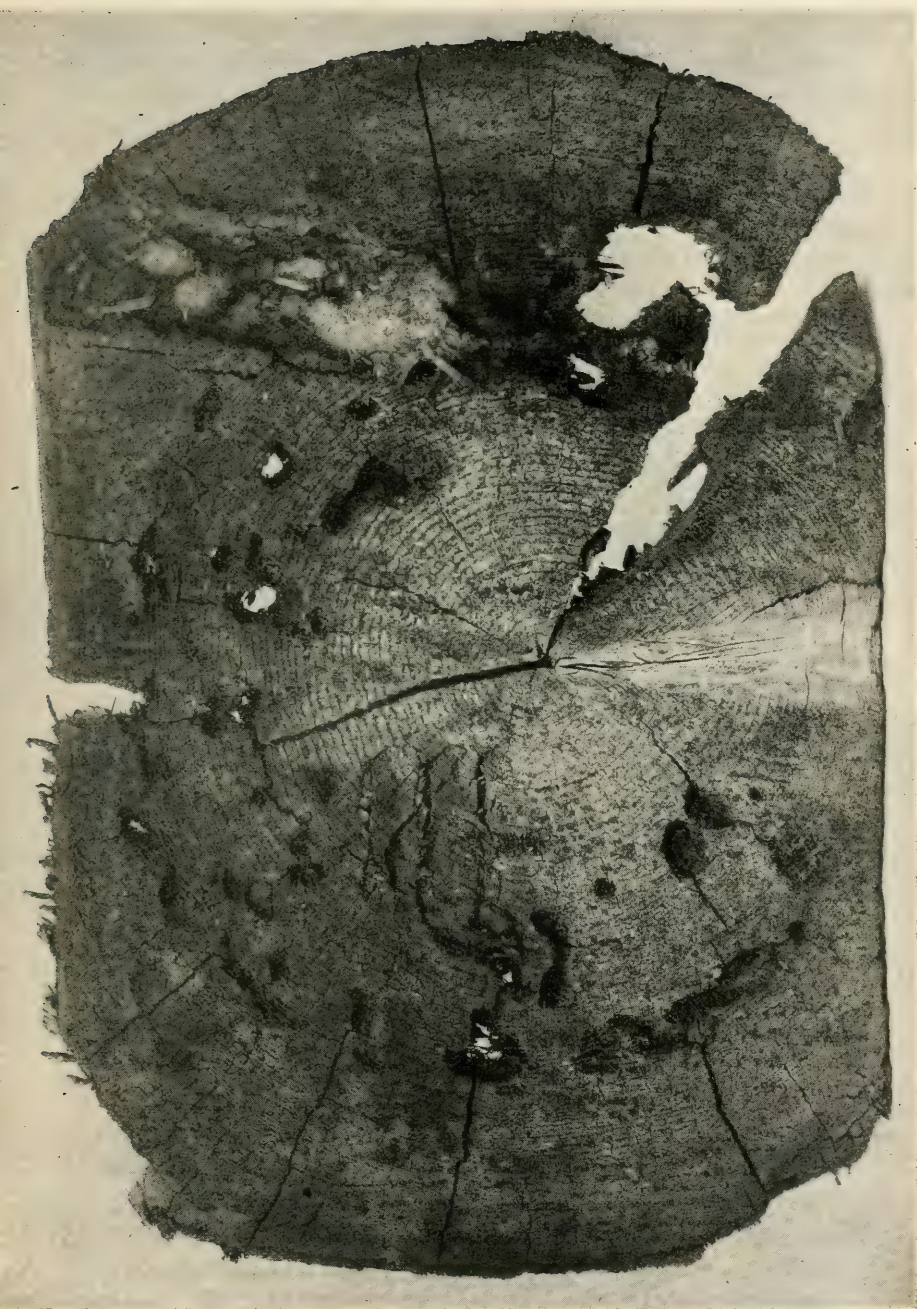


Fig. 11. Section of railroad tie injured by Timber Worms. Specimen from same place as Figure 10.

brought to bear upon the post and tie supplying regions. This condition of railroad stock is common throughout the State and when considered for the United States, the loss would be enormous.

WHITE ANTS OR TERMITES.

The character of injury by white ants or termites, is shown in Fig. 12. It consists of burrows, galleries and tunnels of varying sizes, and of every conceivable shape, extending in all directions

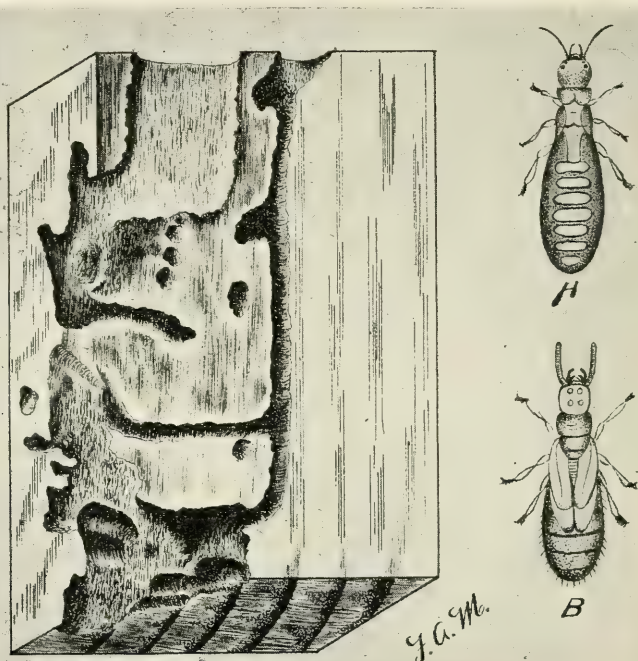


Fig. 12. Work of White Ants, or Termites (*Termes flavipes*), in sound and dry Red Oak: A, female; B, pupa. Drawings from specimens collected near Paoli, Orange County, Indiana.

through the wood. In wood land almost any log or decayed tree will be found swarming with these dirty yellowish-white insects. They were found working at the base of many trees suffering from fire injury, and the damage thus caused was in many cases worthy of note.

The injury to forest products, both crude and finished, consists of a partial or complete destruction of the infested material. A great variety of products is affected, such as round and square

timber left for some time, next to the ground; posts and poles in the ground; railroad ties, bridge timbers and lumber at the bottom of seasoning stacks. These insects are also destructive to the underpinning, flooring and other wooden parts of buildings which

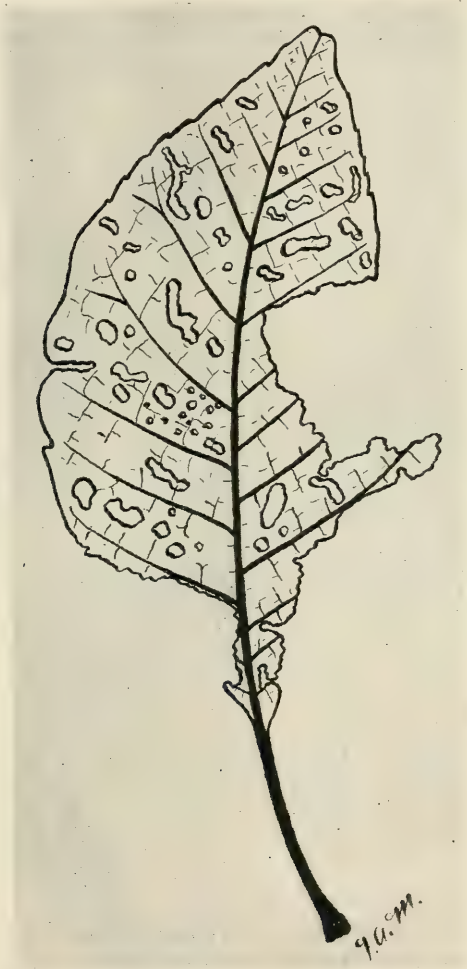


Fig. 13. Leaflet from small Ash sprout, where the damage from leaf-eating insects is most noticeable.

are easily accessible to these destructive forms. The excavations are made for the purpose of obtaining food and to serve as habitations and brooding places for the countless numbers of individuals which occupy them. No means of control other than a removal of all infested parts can be suggested.

INSECT INJURY TO THE FOLIAGE OF TREES.

This injury, though the most common, rarely results in the death of the tree. The most injurious effect of this class of insect is on young seedlings and the rendering unsightly of many shade and ornamental trees. There are numerous species representing several families which feed upon the foliage of forest trees, their number being too great and their economic value too small to justify a detailed discussion.

Hardly a tree is absolutely free from their attack and resulting injuries are shown in Figs. 13, 14, 15, 16, 17, 18 and 19. This type of injury is caused by various leaf-eating insects, and is, indeed, only a very small representation of their manner of attack. Saw-flies, leaf miners, leaf bugs, and numerous others all have their

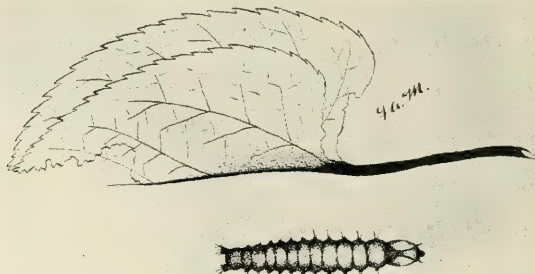


Fig. 14. Leaf Folder on American Linden (*Tilia Americana*). This, with other leaf eating insects, cause much damage to the Linden in nearly all localities.

peculiar methods of attack and some are very characteristic of the species.

The leaf rollers are among the more numerous types and are found on many species of trees. In no case were they found in alarming numbers and in any one locality and the injury resulting was very slight. Figures 15, 16, 17 and 18 show the methods of attack usually employed by the caterpillars of these insects.

GALL FLIES.

Another class of leaf injury is caused by the gall producing insect. The "gall-flies" belong to the family Cynipidae, and are curious creatures. They are mostly parasites and derive their name from the fact that they produce swellings, protuberances or "galls" of great variety on vegetable tissue. Sometimes they oc-

cur on leaves, twigs, trunks or even on the roots of plants. When these insects are called parasites it is intended to express the idea that they do not actually eat the infested plant tissue. The irritation caused by the larva induces an abnormal growth in the affected part of the plant and within a cell within this growth it has

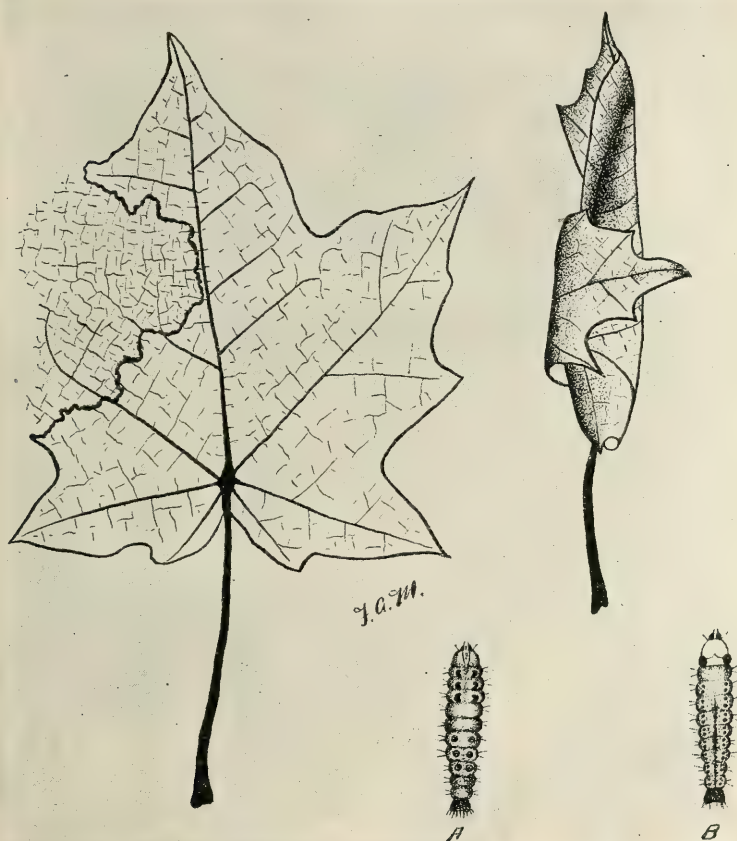


Fig. 15. Sugar Maple attacked by Leaf Roller. Two views of same leaf. During the larval stage of this insect the leaf furnishes the food material. A and B, two views of larva.

its home. The mature insect emerges from this gall, leaving it intact, and disappears without doing further damage to the leaf or other organ upon which it may be growing.

There are only a few injurious species among these gall flies, and the damage to forest trees is very slight. Two forms were noted which had, in a limited number of cases interfered slightly with the



Fig. 16. Leaf Roller on Shellbark Hickory: A, leaf completely folded: B, leaf unfolded. Note the extent to which leaf is eaten. C, pupa of Roller.

growth of the infested trees. One was on the hickory (*Hicoria alba*), and the other on the elm (*Ulmus Americana*). This form on the hickory (*Phylloxera caryaefallax*) causes a cone-shaped gall on the upper surface of the leaf. The insect emerges through an opening in the apex of a much shorter cone on the under side of the leaf. This form was found throughout the State, but more frequently in the southern part.

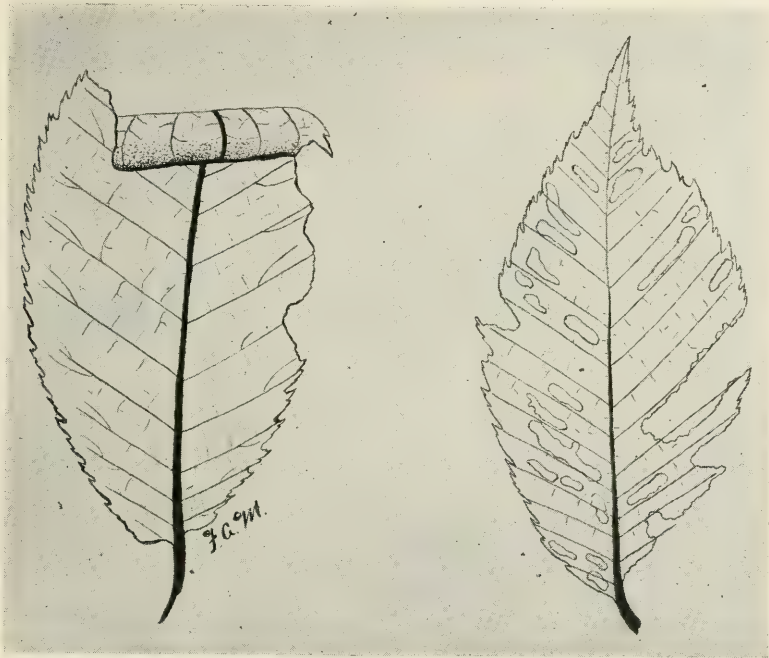


Fig. 17. Effects of defoliating insects on Elm. Injury of this nature is considerable throughout the State.

The other form mentioned is the cock's comb gall on elm (*Colopha ulmicola*) (Fig. 19). The gall forms on the upper surface of the leaf, with the opening on the lower surface. It resembles the leaf in color, but is frequently tinged with red. It is a very common form, widely distributed over the State. Though so exceedingly common, it is rarely of sufficient abundance to be troublesome. In a few cases it was found on a large percentage of the leaves of small trees, but even then the direct injury to the tree was indeed slight.

COTTONY MAPLE SCALE. (*Pulvinaria innumerabilis*.)

The past few years have witnessed an increase in the cottony maple scale throughout central Indiana. This occurrence and increase has been noted in several parts of the United States, and in many localities it has been reported in injurious numbers. Places

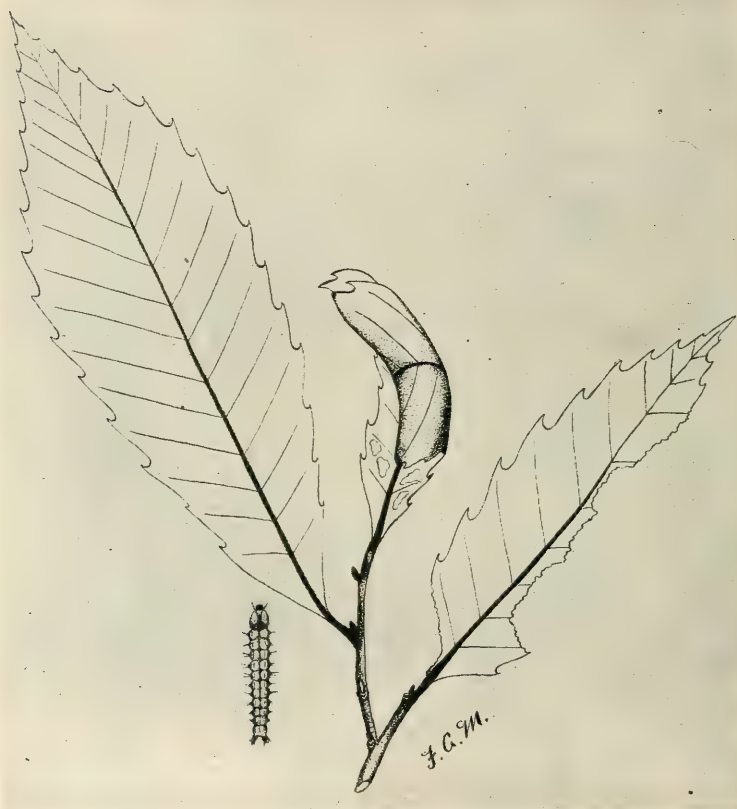


Fig. 18. Chestnut (*Castanea dentata*). Leaf Roller and effect upon foliage. The Chestnut of Indiana is only very slightly injured by leaf destroying insects.

where the maple tree has been extensively cultivated for shade have experienced serious attacks, and from these places have come the most bitter complaints. The reason for these localized attacks is not positively known, but is supposed to bear some relation to the artificial conditions under which the trees are grown. Under forest conditions the insect appears to be held in check by natural

enemies, which doubtless find protection in the depths of the forest which is denied them among trees planted on private grounds and in parks.

The soft maple (*Acer saccharinum*) of our own cities has suffered from this insect and some effort should be made to prevent its further spread. Especially have its injurious effects been noted along the streets and in the parks of Indianapolis.

The various species of maple, particularly the soft maple, including the box elder (*Acer negundo*), are the favorite food plants



Fig. 19. Cock's-comb Gall (*Colopha ulmicola*), on leaf of Elm (*Ulmus Americana*). Also, winged adult of the Gall producing insect. This form may be found over wide areas.

of this insect. It has been found, however, on forty-seven species of trees, shrubs and vines, including maple, oak, linden, elm, willow, poplar, beech, hawthorn, sycamore, locust, hackberry, mulberry, grape, poison-ivy, peach, currant, rose and Virginia creeper. It is possible that a careful study will prove that all of these infestations are not referable to one species.

The form here mentioned (*Pulvinaria innumerabilis*) has been treated in detail by L. O. Howard, entomologist for the United States Department of Agriculture, in Circular 64, and reference

should be made to this publication for further information. In it the habits and life history of the scale are taken up in full, and practical seasonal treatments for preventing its multiplication and consequent spread are suggested and strongly recommended.

CONCLUSIONS.

The investigations, of which this report is a result, covered sufficient territory to insure a representation of the conditions as existing throughout the State, and from these investigations the following conclusions have been drawn:

(1) Insects causing the death of the tree.

(a) Found in extensive numbers and causing serious injury, as follows: Bark-beetles on oaks, hickories and locust.

(b) Found in limited numbers and causing secondary injury, as follows: Bark-beetles on walnut, wild cherry, hackberry, elm, mulberry and ash; bark-boring grubs on oak and chestnut.

(2) Insects not causing the immediate death of the tree.

(a) Found doing serious damage to timber and timber products, as follows: Carpenter worm on oak; wood-borers on hickory; powder post borers on hickory. On seasoning products, the timber worms, white ants, powder post and pin hole beetles were numerous.

(b) Injury to foliage.

Nearly all species of trees found affected by one or more of the following forms, of which all except the cottony maple scale cause little damage. Leaf eater, leaf miners, leaf rollers, saw flies, scale insects and gall flies.

OAKS, HICKORIES AND ASH AS INFLUENCED BY SOILS AND OTHER ECOLOGICAL FACTORS.

One of the principal objects of this report was to determine, if possible, the influence of physiographical elements and conditions on the growth and natural development of the oaks, hickories and ash. The ecology of the forest being extremely varied and complex, this problem is at once recognized as presenting many confusing and contradictory factors. It would be a vastly more simple undertaking if the forest lands of Indiana were in a primitive state. In almost every case, however, the territory studied was devoid of virgin timber. Consequently, the conclusions arrived at in this report must be accepted in their broadest sense.

The above-named forms, viz., oaks, hickories and ash, being associated groups, the lines of demarcation between local regions of best development are drawn with extreme difficulty. This difficulty increases when the total area studied is in any way limited to specific localities. A great variety in conditions and influences is essential to extreme accuracy. Even then there is a possibility of overlooking or misinterpreting important factors. The localities selected for these investigations are located in parts of the State representing as widely differing conditions as was possible to obtain. Considerable data of a comparative nature has thus been obtained, and the results should be of equal value throughout the State.

Before proceeding further, a short discussion of the geographical distribution of forest trees is deemed necessary. The trees of the United States divide themselves into natural and regular zones or areas, according to climatic conditions. The form and extent of these zones are influenced and modified by local conditions such as: General contour of the land; soils; precipitation and relative humidity. In some cases these climatic zones are separated and distinguished by well marked and absolute boundaries, but more frequently the transitions from one zone to another are gradual and indefinite, one form merging into another in such a complex and confusing manner that the casual observer cannot tell definitely where one form disappears and the other begins. These, or similar conditions are encountered when an attempt is made to separate, into natural groups, the types of trees found within a climatic zone. It should not be understood, however, that a complete separation of these forms has been attempted. The oaks, ash and hickories are many times found growing luxuriantly under ap-

parently similar conditions of soil, soil moisture, aspect of land, etc., and a separation even in the broadest sense would not be practical. The purpose in mind has been more to designate the conditions favorable for their best natural reproduction and development, than to separate them into localized areas.

PHYSICAL CHARACTERISTICS OF THE SOIL.

SOIL INGREDIENTS.

- | | | |
|-----------|---|---|
| 1. Sand. | } | A mixture of these four ingredients makes a loam which is the most valuable of all soils. |
| 2. Silt. | | |
| 3. Clay. | | |
| 4. Humus. | | |

CHARACTER OF INGREDIENTS.

Sand—Grains of quartz large enough to be seen with the naked eye.

Clay—Very fine particles of rocks such as silica, limestone, mica and feldspar.

Silt—Soil particles intermediate between clay and sand. It holds water well and is rich in plant food.

Humus—Mostly decayed vegetation.

LEADING TYPES OF SOILS.

Classed according to the predominating ingredients.

Sandy soils—Contains 80 per cent. of sand and less than 10 per cent. of clay.

Clayey soils—Soils consisting mainly of silt.

Humus soils—Soils in which decayed vegetation predominates.

Loam soils—Combinations of sand, silt, clay and humus, the sand predominating in sandy loams and clay in clayey loams.

PER CENT. OF INGREDIENTS IN VARIOUS SOILS.

Sandy loams—60 to 70 per cent. sand.

Light sandy loam—70 to 80 per cent. sand.

The other ingredients of these soils are clay, silt and humus.

Clay soils—60 per cent. or more of clay and silt. Clay soils being exactly the reverse of sandy soils.

Clay loams—30 to 40 per cent. clay, 25 to 30 per cent. sand.

Heavy clay loam—10 to 25 per cent. sand.

Loess soils—Fine silt or clay, containing 55 to 75 per cent. of

silt and 6 to 15 per cent. of clay. Found over considerable areas in southern Indiana.

In selecting a soil for any purpose special attention must always be given to its physical conditions. S. W. Fletcher says, in his treatise on "Soils, How to Handle and Improve Them," that the cause of the unproductiveness of soils is due to the physical conditions and not to the chemical contents. The problem of soil fertility for any growing form depending, not so much upon the amount of plant food present in the soil, as upon its physical character.

A mechanical analysis of many of the dominant soil types could be given, but would do little to assist the ordinary observer in any undertaking with forest plantings. Also the varying conditions and widely differing types of soils found in Indiana, in addition to the fact that they are most confusingly and miscellaneously distributed over the State, makes it absolutely impossible, and to a degree impracticable, to do more in such a limited time, than consider general and predominating types.

"The soils of Indiana may be roughly classified into three great groups, viz., drift soils, residual soils and alluvial soils. The drift soils are found in the northern three-fourths of the State, are extremely varied in depth and character and are formed of a mass of heterogenous material which was brought to its present resting place by a great glacier or slowly moving sheet of ice, which thousands of years ago covered the area mentioned.

"The residual soils are found in the counties south of the southern limit of the glacier. They were formed, for the most part, in the place where they are now found, by the decay of the underlying limestone or sandstone rocks." (See Fig. 20.) "The variety of materials entering into their composition is therefore limited, and they are, for this reason, among the poorer soils of the State."

"The alluvial soils are those of the river and creek bottoms throughout the State. Gentle rains and earthborn torrents, little trickling rills and strong streams are ever at work tearing down the soils and underlying clays from every slope, and bearing them away to lower levels. The small water-formed trench of today next year becomes a chasm and ages hence a hollow, and the transported material is gradually deposited as alluvial soil over the so-called 'bottom-land' which are annually overflowed.

"The drift soils cover the northern and central portion of Indiana, derived, as they were, from various primary and igneous rocks in the far north, ground fine and thoroughly mixed as they were

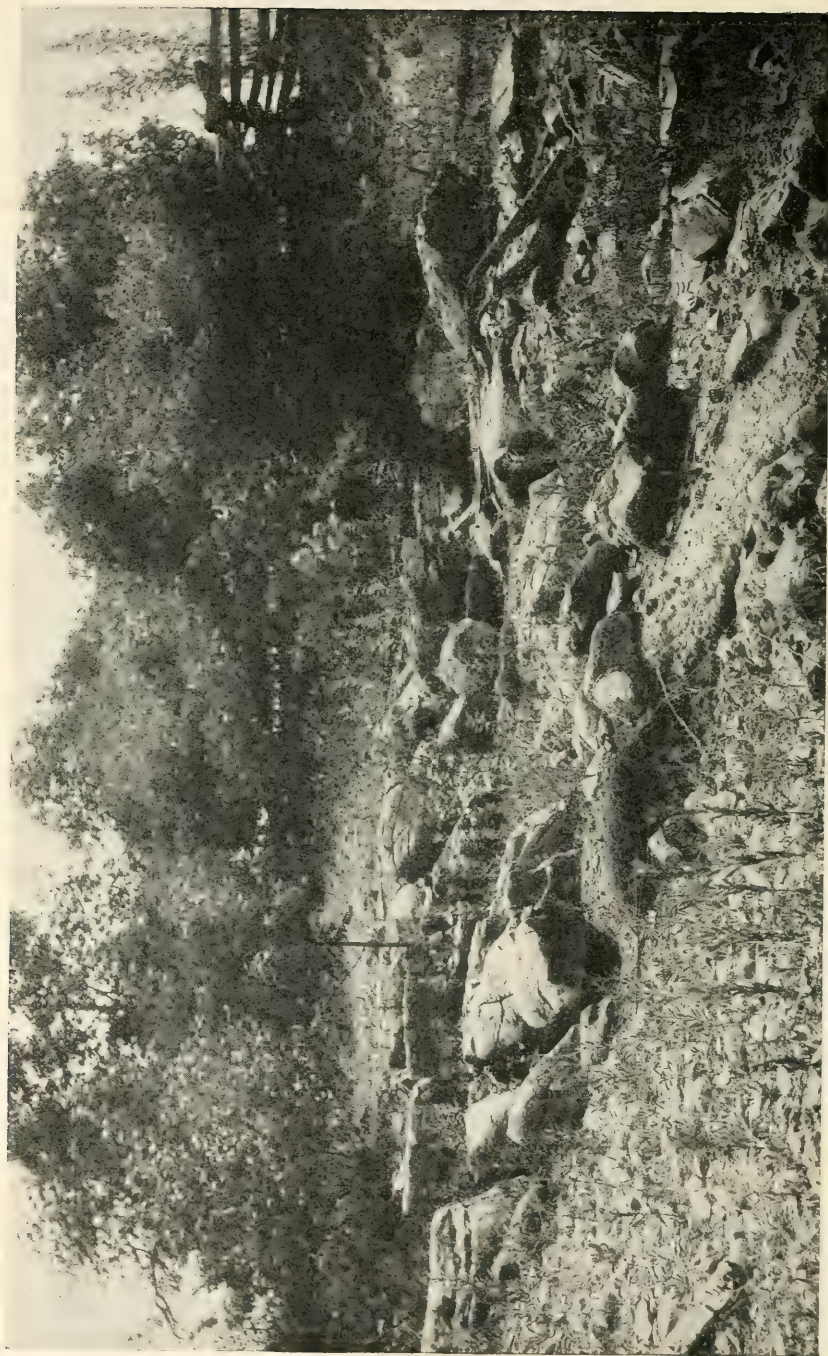


Fig. 20. Outcropping of limestone rock near Paoli, Indiana. The relation of the underlying rock strata to soil formation is plainly evident in the above photograph.

by the onward moving force of a mighty glacier, are usually rich in all the necessary constituents of plant food. Neither they nor the alluvial soils require a large annual outlay for fertilizers, as do the residual soils of southern Indiana, over which the drift of the glacial period did not extend."—Blatchley, 21st Annual Report of the Department of Geology and Natural Resources, 1896, pages 21 and 22, State of Indiana.

The soils of the northern and central counties assigned for investigation came under the class of drift soils, while those of the southern came under residual soils. The alluvial soils being distributed to some extent over the entire State, are found in each of the three groups of counties. These counties being assigned in groups of threes, each group representing consecutively northern, central and southern conditions, the soils and other topographical features will only be discussed for the groups, and not for each separate county.

The northern group therefore, consisting of Marshall, Starke and Kosciusko, lies in the northern central part of the State. Data collected by the United States bureau of soils shows a fairly uniform distribution of rainfall throughout the year, with a maximum during the growing season. The temperature is characterized by sudden changes and by alternating freezes and thaws, during the winter and early spring. From a tree planting standpoint these are unfavorable conditions and many reports were received where young growths of catalpa and black walnut were killed or "frozen back" to such a degree that the season's growth was indeed slight. See Fig. 30, which is a planting of black walnut where numerous trees were killed by severe and rapid changes in the temperature, and by the cold winds which sweep across this part of the State during the winter months. Soil conditions also played a most important part in the success of this planting, but will be discussed later. Specific examples cannot be considered at this point, but must give place to a more general description of soil and surface conditions.

This northern group of counties, falling as it did directly in the path of the glacier, is covered to a great depth by drift deposits. No outcrop of stratified rock is seen, nor has it been reached by the deepest borings. The character of the surface materials though not widely differing, is found to vary to a considerable extent with the general topography of the land.

Generally speaking, a line running north and south through the center of Marshall County separates the sandy soils from the clay

soils. What are known as "clay soils," to which the government has given the name, Marshall loam, is found principally east of this line. The "sandy soils" occur west of this central line and are of several distinct types. Three of the principal ones are, Marshall sandy loam, Miami sand and Marshall sand.

The topography of this group of counties is quite level, with small areas of rolling country along Yellow River and in the vicinity immediately surrounding the lakes. That part lying east of the central line above mentioned is comparatively level or gently rolling, with scattered groups of low hills. Westward from this line the land takes on a more rolling topography, until well into Starke County, where with many intervening depressions or slight valleys it gradually assumes a low level aspect, characteristic of the Kankakee region. The so-called boulder clay is in this part found at greater depths, while the sand increases until finally the "sand barrens" are reached. These barrens seem to be wind-blown deposits and frequently take on the characteristics of sand dunes. They are also found in many places to have the appearance of old beach lines. There are many basins and depressions over the entire area, but are more extensive east of the central line. The basins are generally known as marsh, and the soil found within them is ordinarily classified as muck. In many parts boulders are scattered over the surface of the ground and consist chiefly of granite, gneiss and other metamorphic rocks. From records obtained from borings these rocks seem to be more abundant near the surface. This is a natural result and accounts only to a very slight degree for the different classes of soils found in this region.

As many as nine types of soils have been classified and described from this region. They range in texture from sand to clay loam and are thus seen to offer a wide diversity as to productivity. Of these nine types, the Marshall loam occupies by far the largest and most uniform areas. It is found chiefly east of the dividing line, but occurs west of it in small areas. This type of soil was originally covered with a heavy growth of black walnut, and is still locally known as the "black walnut land." Even now an occasional small patch is seen where the original timber has been reserved, but these patches are rapidly disappearing and in a few years will be entirely removed.

The sandy soils, found west of the central dividing line, are comparatively shallow and of medium texture. In the depressions and low valleys the soil becomes more loamy, darker and extends to greater depths. These sand soils, of which there are three prin-

cial types, are generally rolling and many times resemble sand dunes in form and appearance. It is highly probable that a large portion of this section of the country was formerly old sand dunes on which plants have obtained a foothold and checked the action of the wind and the resulting movements of the sand. Considerable of this type was originally covered with timber, but the trees were chiefly scrub oaks with a few other less valuable trees of medium size scattered here and there.

The second group of counties, Clinton, Howard and Grant, is centrally located and must be taken as typical of central Indiana. The climatic conditions are about the same as the average mean temperature and precipitation for the State. The surface features of this area consist of undulating plains, with broad level areas between the natural drainage basins, which become more or less rolling and sometimes quite hilly as they near the water courses.

The underlying rocks are in some places exposed along the streams that have cut through the glacial drift. In general, however, they have such a limited exposure as to have little influence upon the character and productiveness of the soils. The greater part of the area is covered with a comparatively deep deposit of glacial drift, broken and eroded in many places by natural waterways. Hills of washed gravel are also frequently found which were deposited by streams beneath the melting glacier, the finer sediments being carried on to form the surface soils of areas farther south.

The soils of this locality are largely made up of clay loam, with small intervening areas of muck and sandy loam. Four prevailing types are recognized. The clay loam is the type most frequently found and ranges in depth from 6 to 12 inches. It grades into a clay or heavy clay loam of a stiff heavy character, which is generally underlain by gravel or gravelly clay. At varying depths in the subsoil are found beds of gravel and sand, which when near the surface have resulted in a gravelly loam, underlain by gravelly clay or gravel. These gravelly clays are frequently met with throughout the extent of central Indiana. They are, however, in narrow streaks, particularly along river courses, and are in general the result of surface washing and erosion.

Under the above conditions the original growth of timber was magnificent. It consisted of a mixture of oaks, ash, hickories, elm, beech and sugar maple. This original stand, once dense and heavy, has gradually disappeared, and now instead of extensive forests we find a few scattered woodlots.

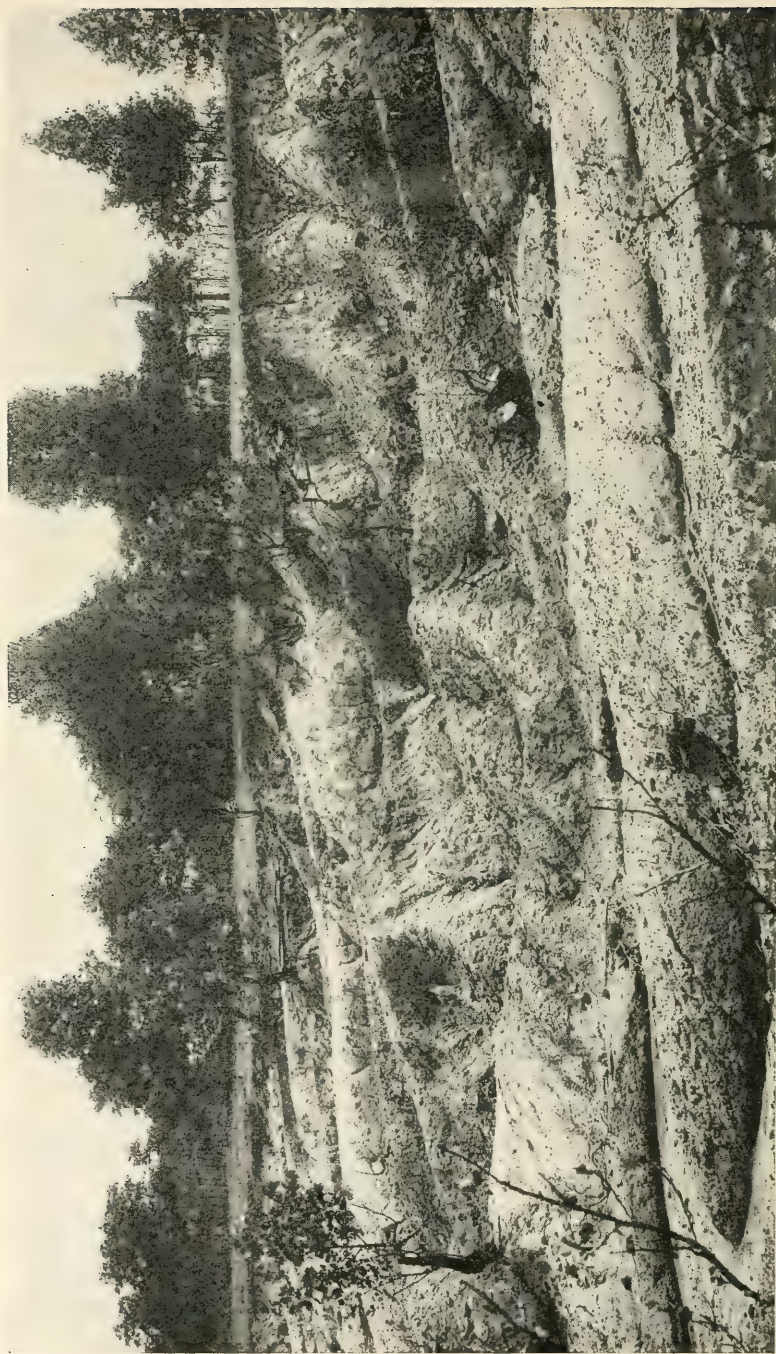


Fig. 21. Washed and eroded condition of a low hill from which all timber and underbrush had been removed. Photograph taken near Paoli, Orange County, Indiana.

The other important soil types of these counties are black clay loam, Madison loam, consisting of brown or yellow loam or fine sandy loam from 8 to 14 inches deep, and muck, a term given to the class of soils in which organic matter in various degrees of decomposition is the dominant characteristics.

The third group of counties, Orange, Martin and Washington, are of the southern location and are indeed typical of this rough, broken region. Being one of the most heavily timbered sections of the State, the settlers from the earliest down to the present time, have depended largely, and in many cases wholly, upon forest products as their main source of income. That this statement holds true to a certain extent, even to the present time, is due, almost entirely, to the physiographic features of this section of the State.

Two controlling factors have been active in the physiographic development of this locality—the limestone, sandstone and arenaceous shale, and the black slaty shale. The upper strata of the first group, which cap the hills in the southern part of these counties, have resisted the agencies of erosion better than the softer underlying shale, and the results are a broken and hilly topography. The shales belonging to the second group, which underlie the soils in many localities, have given rise to a more rolling and undulating character. The numerous hills have been cut by streams which have formed v-shaped valleys. Excellent examples of such valleys are common in the western part of the section along the course of the east fork of White River, which has cut its way many feet through the sandstone deposits. Broad valleys and level uplands are often encountered, where the summits of the surrounding hills are comparatively level, and the hillsides slope gradually towards the small streams. More often, however, the hillsides are steep and the soil covering very thin. At these points erosion and weathering are most effective and the removal of the timber and underbrush soon cause them to assume a desolate appearance. Many such washed and denuded areas are present throughout our southern counties and are generally the direct result of a poor understanding of natural laws and existing conditions. For an example of such conditions, see Fig. 21. This photograph represents the general washed and weathered condition of much of the hilly land surrounding Paoli, Orange County. Also, see Fig. 22, where the steep hillside is securely held against erosive agencies by a dense and luxuriant growth of red cedar.

The geological formations which underlie this area are most frequently exposed on the steeper slopes and are indeed seldom at any

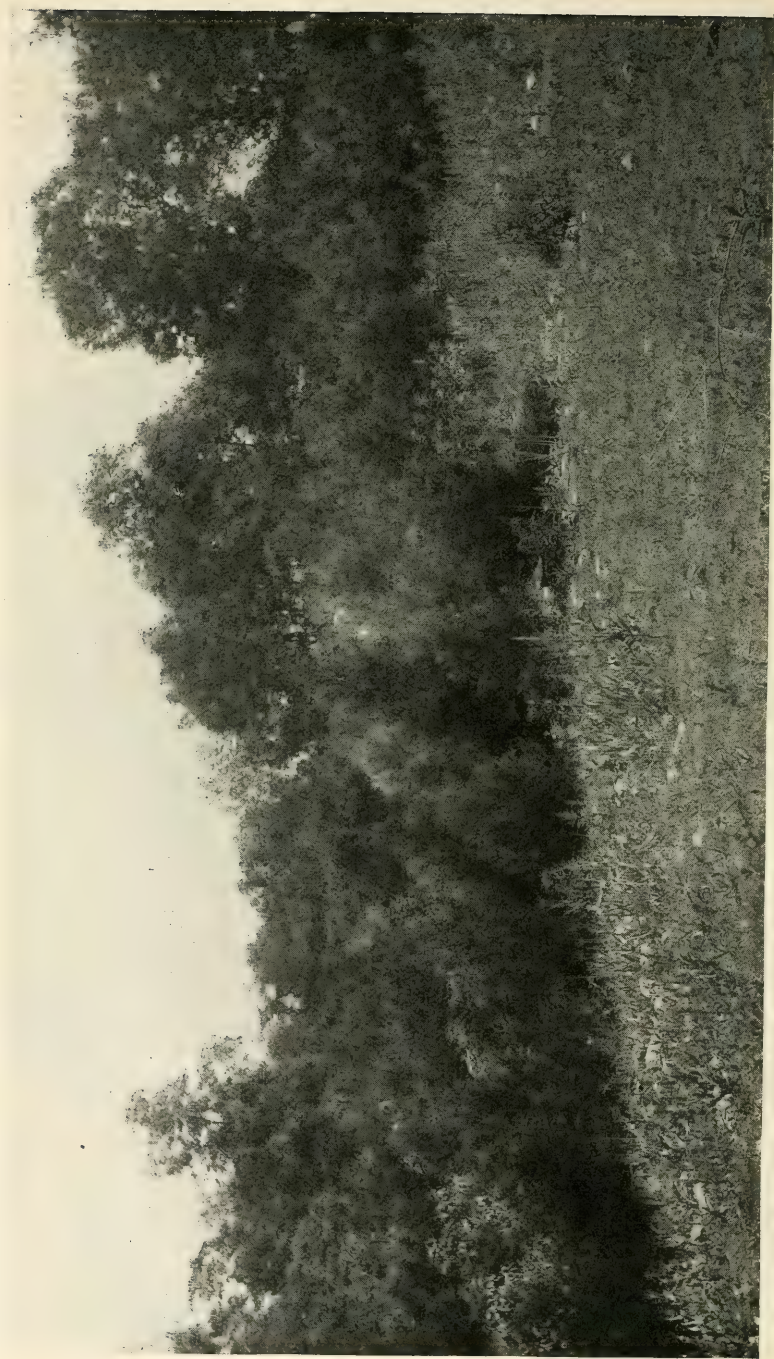


Fig. 22. Young growth of Red Cedar on hillside, showing nature's method of soil binding against the agencies of erosion.

great depth below the surface. See Fig. 20. Many of these underlying rocks are of a type that weather rapidly upon exposure, and have undoubtedly entered largely into the composition of the various classes of soils. See Fig. 20 for outcropping of rock strata, where all gradations from the solid rocks to the heavy clay soil is plainly evident. Being derived in this way, from the underlying rocks, the soils of this region consequently present a more limited variety of conditions, favorable to the development of plant life. Although it is believed by many that a considerable portion of the surface material covering many of these southern counties is of glacial origin, it is very probable that it was mainly local in its derivation. This probability is confirmed by the scarcity of glacial boulders or fragments of igneous rocks in the soil.

Four types of soils are found in this locality, all coming under the general head of silt soils. Of these, three are thought to be derived directly from the weathering of the underlying geological formations. The fourth, which occurs only in the low, flat "river bottom land," is derived from materials brought down and deposited by streams.

This general discussion of soil formation and distribution has been thought necessary to the better understanding of the following statements, which relate to the conditions most favorable to the growth of the oaks, ashes and hickories.

OAKS.

The oaks are widely distributed over the central and eastern parts of the United States. The natural range, generally speaking, extends from Nova Scotia to the region west of Lake Superior and south to eastern Kansas and northern Georgia. This wide range of distribution suggests the varying conditions under which many species of the oaks may be found. They are associated forms and are found growing with elm, basswood, chestnut, hickories and other of the common hardwoods. Their soil requirements are variable and in the nine localities investigated they were found growing equally well upon several distinct types of soils. Only when we reach the low undrained glacial basins of northern Indiana do we see a falling off in the development of the oaks. In this region we have the magnificent forms of central and southern Indiana replaced by the stunted Spanish and swamp white oaks. These forms are too near their northern limit to develop naturally, and the other valuable species extending this far north are so influenced by physiographic conditions that they rarely exceed more than a low branching form unfit for commercial purposes.

RED OAK. (*Quercus rubra*.)

The red oak has been found over such a wide range of soil conditions that the statement has been made that it will thrive in any soil except an undrained one. This statement includes abandoned and otherwise worn out soils. It has been found more practical, however, to limit this exceedingly general statement and say that red oak is best suited to porous, sandy or gravelly clay soils. It thus stands intermediate in its requirements between the white oak and several of the black oaks. It always requires good drainage, and no planting should be attempted on any soil, however fertile, unless this physiographic feature is present.

WHITE OAK. (*Quercus alba*.)

The white oak is found in the north-central, central and eastern States. Indiana falls directly within its region of best development. This region, which is of more far-reaching boundaries than the State of Indiana, includes the western slope of the Allegheny Mountains and other portions of the valley of the Ohio River. The white oak is the most valuable of American oaks, and is indeed worthy of closer attention than it is receiving at the present time. In certain isolated areas and on a few abandoned hillsides in southern Indiana, the white oak is making a slow but otherwise persistent effort at natural reproduction. This effort, however, receives no artificial aid and is, in a majority of cases, even interfered with by an utter disregard of natural laws. This interference with natural reproduction is a result of careless lumbering and a failure on the part of the land owners to acquaint themselves with the principles of the forest policy which is now being agitated through every State of our Union. This is another phase of the subject under discussion, however, and cannot be considered here.

The white oak is found to do best on rather deep and moderately moist well-drained soils. A loamy sand where the amount of sand may run as high as 80 per cent., and situated in warm localities, is found to be exceedingly favorable. It will also succeed on poorer soils and is often found where the per cent. of clay is quite large. It is recognized as a light needing species and though capable of enduring shade while very young, never does so with advantage.

BUR OAK. (*Quercus macrocarpa*.)

The bur oak being closely associated with the white oak, is found over a wide range. It is distributed from Manitoba to Texas, and eastward to the Atlantic coast. It is an important tree in our

State and has reached its greatest development throughout the Mississippi basin. Here it is found associated with white oak, basswood, white ash, cottonwood, black walnut and some of the hickories. About the Great Lakes and in the Dakotas it is sometimes found in pure stands, forming the characteristic "oak opening." Throughout this section of its natural range, however, it never occurs except in the presence of other forms.

The bur oak requires a better soil than the white oak, being best suited to a deep, rich, so-called "river-bottom" soil. A rich loam is indeed its favorable soil, but it is often found growing and maintaining itself in poorer upland localities. It is recommended for planting only where the soils are fairly rich, and though low, they should be well drained. This species, though somewhat intolerant, will endure more shading than white oak. It is not thought, however, that it is intolerant to such an extent that it could be recommended as an undergrowth beneath some more rapidly growing form.

Two other species of oaks about which only a few words can be said, are the chinquapin oak (*quercus acuminata*) and the swamp white oak (*quercus platanoides*). The chinquapin oak is another form which reaches its best development in the lower Ohio Valley. Like most other oaks it will thrive on a wide range of soils. It does best on deep, rich, moist, well-drained river bottom land. It is also not uncommonly found on dry limestone situations such as are found in southern Indiana.

The swamp oak which reaches its greatest size south of the Great Lakes, is found on a deep moist soil or even in inundated swamps. Low banks of water courses are often grown up with this form and many loose, rich and fairly moist uplands are often covered by a mixed growth of which this species forms an important factor.

ASHES.

The ashes are distributed over a considerable portion of the United States east of the Rocky Mountains, the green ash even extending into those mountains in Utah and New Mexico. They are most abundant in the Mississippi Valley, where, though often occurring as the leading species, they seldom occur in large masses or pure stands. More generally they are found as individuals or in small groups among other hardwoods. The species with which they are associated are maples, elms, basswood, birches, walnuts and oaks.

WHITE ASH. (*Fraxinus Americana*.)

The white ash is a natural forest form, reaching its maximum size in the lower Ohio Valley. In the forest it is a tall, slender tree surmounted by a crown, somewhat open and made up of stout upright branches. Its natural distribution is from Nova Scotia and Newfoundland to northern Florida, central Alabama and Mississippi and westward to Ontario, northern Minnesota, eastern Nebraska, Kansas, Indian Territory and Texas. Its range for economic planting has been designated by the Government Forest Service as extending from the valley of the Wabash and Ohio Rivers, north and west through Indiana and Illinois to the region of the Great Lakes; westward through Iowa, southern Minnesota and eastern South Dakota; southward through eastern Nebraska and Kansas into northern Oklahoma and Indian Territory.

In its habits and growth the white ash prefers a rich moist soil. The finest trees have been found in the bottom lands of rivers and in the valleys of rolling uplands. The mild climate of the west central portion of its range offers the most favorable condition for its development. While apparently doing best in a protected valley, on a loam soil containing sufficient sand to make it light and easily worked, the white ash will thrive, under much less favorable conditions, and even in adverse localities. Indeed a wet, compact soil is not objectionable if well drained. It has been said that a porous sub-soil is absolutely essential and that a water table at a depth of from 10 to 12 feet offers considerable advantages. This last statement was varied by observations in the southern counties, where the valleys and low hillsides were, in many cases, found supporting a vigorous growth of young ash seedlings. The ash seedlings will endure considerable shading while young, but it requires light for its perfect development.

GREEN ASH. (*Fraxinus lanceolata*.)

The green ash, a species closely related to the white ash is, when forest grown, a medium sized, rather round-topped tree with a straight, slender bole and branches more spreading than in the case of the white ash. It rarely exceeds a height of 60 feet and a diameter of 24 inches. It is thus a much smaller tree than the white ash, which reaches a height of 80 feet and a diameter of 3 feet.

In distribution it follows closely the boundaries of the white ash, extending them, however, in the north and southwest part of its range. Along the drainage basins of the middle west this form has sometimes been found as the dominant species, but more often

it occurs as scattered individuals. It is most common and best developed in the Mississippi valley, and decreases in number and importance as we follow it eastward, until it becomes rather infrequent.

The green ash will succeed best if planted in low, moist localities. This does not mean that it requires a rich soil, for it has been found making fair growth on dry sandy loam or even on a stiff clay. It is indeed one of the forms which can exist and even develop, under conditions of temperature and moisture which would be fatal to many other forms. It has been grown with some degree of success on upland clay, and although its growth in such situations is much slower than in deep river bottom soils, it is thought that it could be handled with greater safety than most other trees. Indeed, where unfavorable conditions are encountered and a question of hardiness of species arises, the white ash should always yield preference to the smaller green ash. Even on the arid plains of western Kansas and Nebraska, this species has survived on abandoned claims where nearly all others have failed. For economic planting its range has not extended beyond its natural distribution, but it is probable that on account of its resistance to adverse conditions it may prove extremely valuable for planting in regions now being developed throughout the west, which extend even beyond its natural boundaries.

HICKORIES.

The hickories which form the last group to be considered here, are found widely distributed from southern Maine, west through southern Michigan to eastern Kansas, Nebraska and Texas, and south along the Appalachian Mountains to northern Florida, Alabama and Mississippi. The region of best development is on the western slopes of the Appalachian and along the Ohio River and its tributaries.

SHAGBARK HICKORY. (*Hicoria ovata*.)

The shagbark hickory, when forest-grown, usually attains a height of 70 to 80 feet and a diameter of 2 feet. When grown free, as is usually the case when it is planted for nuts, it branches near the base, and the crown becomes full. Under forest conditions, however, the trunk is straight and clear, and the crown small and open.

The shagbark is generally found growing with other deciduous trees, although it is not uncommon to find comparatively pure

stands. Its associate forms are principally the oaks, chestnut, ashes, maples and yellow poplar.

Since it is closely associated with these forms it would naturally be expected to demand about the same requirements of soil and climate. This is true, however, only to a certain degree, and though it may be found growing rapidly under the same soil conditions as these other associated forms, it must not be supposed that it possesses no individual characteristics. The following peculiarities have been observed and are thought necessary to the best development of the shagbark hickory.

A deep, rich, loamy soil is preferred, but many fine trees are found on other moderately rich soils. Even some of the poorer soils, as those derived directly from sandstone and limestone, which are not so compact as to prevent the toproot from penetrating to a moist subsoil, may produce a good growth of hickory. Such conditions are present in the southern part of Orange County, where the sandstone soils are in many instances covered with an almost pure stand of hickory. Hard, compact clay soils or soils containing a large per cent. of sand, underlain by a layer of impervious clay or hardpan, are never recommended for hickory plantings. In many localities in our central counties the absence of hickory may be traced to a subsoil of compact retentive clay, or an almost impenetrable layer of hardpan.

The strong toproot which the shagbark hickory develops must be allowed to penetrate readily to a moist but not a wet subsoil. To make a more general statement it may be said that this tree will make good growth throughout the Middle States in well-drained situations where the subsoil is loose and moist, and wherever it can get abundant sunlight.

The shagbark is intolerant of shade and develops normally, only, when growing in pure stand or when surrounded by other trees which only slightly obstruct the light. When shaded it grows slowly, and very early assumes a dwarfed appearance. Under proper conditions, however, its rate of growth is fairly rapid, and compares exceedingly well with that of the white oak.

Some of the smaller hickories, such as the pignut or swamp hickory (*Hicoria minima*), and the mockernut (*Hicoria alba*), are widely distributed over the eastern United States. They are most abundant in the southern States, this being especially true of the mockernut or *Hicoria alba*.

The first named species often attains a height of 80 feet and a diameter of 2 feet. It is found growing under less favorable con-

ditions than the shagbark. It prefers low, moist situations and will even succeed on wet, swamp grounds. On the other hand, the mockernut, which may reach a height of 90 feet and a diameter of 3 feet, does equally well on poorer and especially on drier soils which may contain considerable clay or gravel. It is said that it will succeed even on rocky barrens. It is a tree, the wood of which is similar to that of the shagbark. It is used to much the same purpose, and were it not for the ravages of insects upon it, it would be a valuable form with which to replace the shagbark on the poorer, drier soils of southern Indiana.

TREE PLANTING.

In connection with the work outlined in the introduction of this report, private tree plantings throughout the assigned territory were investigated. The purpose of these investigations being to determine to what extent such plantings were being undertaken, together with a study of the methods employed in planting and cultivating, and the degree of success attained under the various conditions.

As to the extent of these plantings, little can be said. A thorough investigation of the entire State would be necessary before comparative and accurate figures could be given. It can be said, however, that the relative number of such plantings is extremely small. They are found to be most numerous in northern and central Indiana, and are almost absent in the southern counties. This state of affairs is supposed to be a natural result of the general timber conditions of the State.

The constantly decreasing supply of post timber, is one phase of this general forest condition of the State. With the demand for such timber increasing and the source of supply rapidly decreasing, not only in Indiana, but over the entire central west, the farmer is being aroused to a state of activity which will eventually result in an investigation of the possibilities of growing his own posts. Indeed, many have already taken up this proposition and it is with the idea of encouraging such undertakings that the following data and photographs have been collected:

Fig. 23. *Catalpa* Planting. In this planting both species, *Catalpa bignonioides* and *Catalpa speciosa*, have been used. The mixture is a result of poor selection of seed and an inability to determine the valuable species (*catalpa speciosa*) when in the seedling stage. Many of the trees have branches low and their value will consequently remain below the maximum.

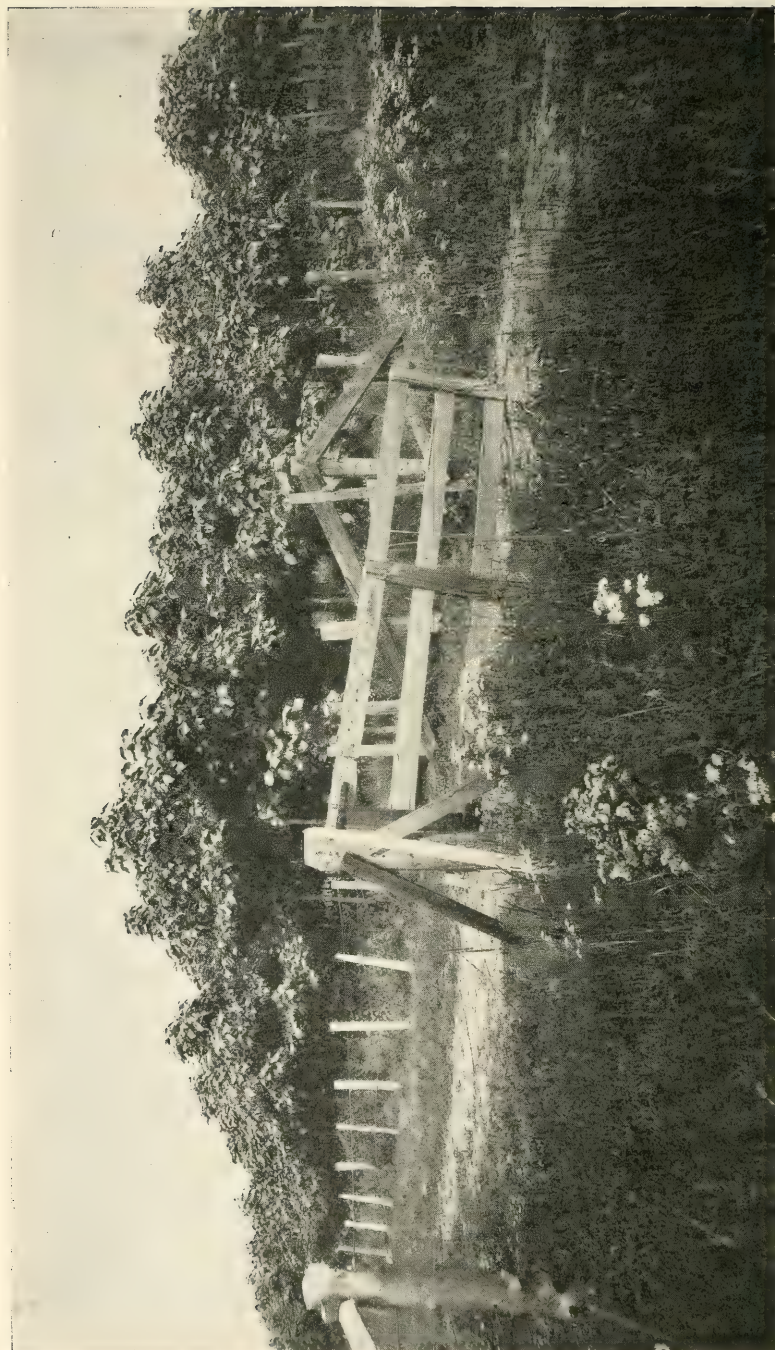


Fig. 23. Catalpa planting on farm of Rockhill Bros., Ft. Wayne, Indiana.

The planting was made by the Rockhill brothers near Fort Wayne, Indiana. The trees were planted five years ago and were cut back at the end of the second year. The rows were eight feet apart and the trees four to five feet apart in the rows. At the time the investigation was made, many of the trees would have furnished two good posts. The planting had been cultivated by the ordinary methods of cultivation, for four successive years. The dense crowded condition of the trees shown in the photograph would suggest the removal of every other tree in each row.

Figure 24. *Catalpa* planting on farm of A. K. Kennert, six miles north of Fort Wayne. These trees are three years old and have an average height of ten feet. The planting had not been cut back, but each individual tree had been annually pruned. This accounts for the clear trunks and light crowns. This planting contains only the species (*Catalpa speciosa*) of which the clear straight trunk and absence of numerous side branches are characteristic. The photograph gives an idea of the wide spacing of the trees which is seven feet each way.

The best spacing for *catalpa* is not at present known. Much is known to depend, however, upon the purpose for which the trees are intended and upon the soil conditions. The trees may be set quite near together, if thinned at the proper time, but it is safest, never to plant so many trees on the ground that when thinning is to be done, the trees which are taken out must be thrown away on account of inferior size. If one would grow *catalpa* successfully he must reduce the struggle for existence to the lowest possible limit. It is said that side branches can be more economically removed by pruning than by close planting. And that an upright growth can be secured at less cost than by overcrowding of trees. Cutting the young trees off close to the ground at the end of the second or third years' growth, insures straight trunks and reduces considerably the amount of pruning, since but few side branches ever develop on sprouts which spring from stumps of trees that are cut back.

Figure 25. Planting of black locust (*Robinia pseudacacia*). The trees are three years old and the planting was made in the edge of a woods in heavy unprepared sod. They were planted in a miscellaneous and careless manner and had received no cultivation. The result is plainly shown in the photograph, where it is seen that many of the two year old seedlings are no taller than the blue-grass in which they are growing.

At least fifty per cent. of this planting was already attacked by the destructive locust borer. The drawings in Fig. 4 were made

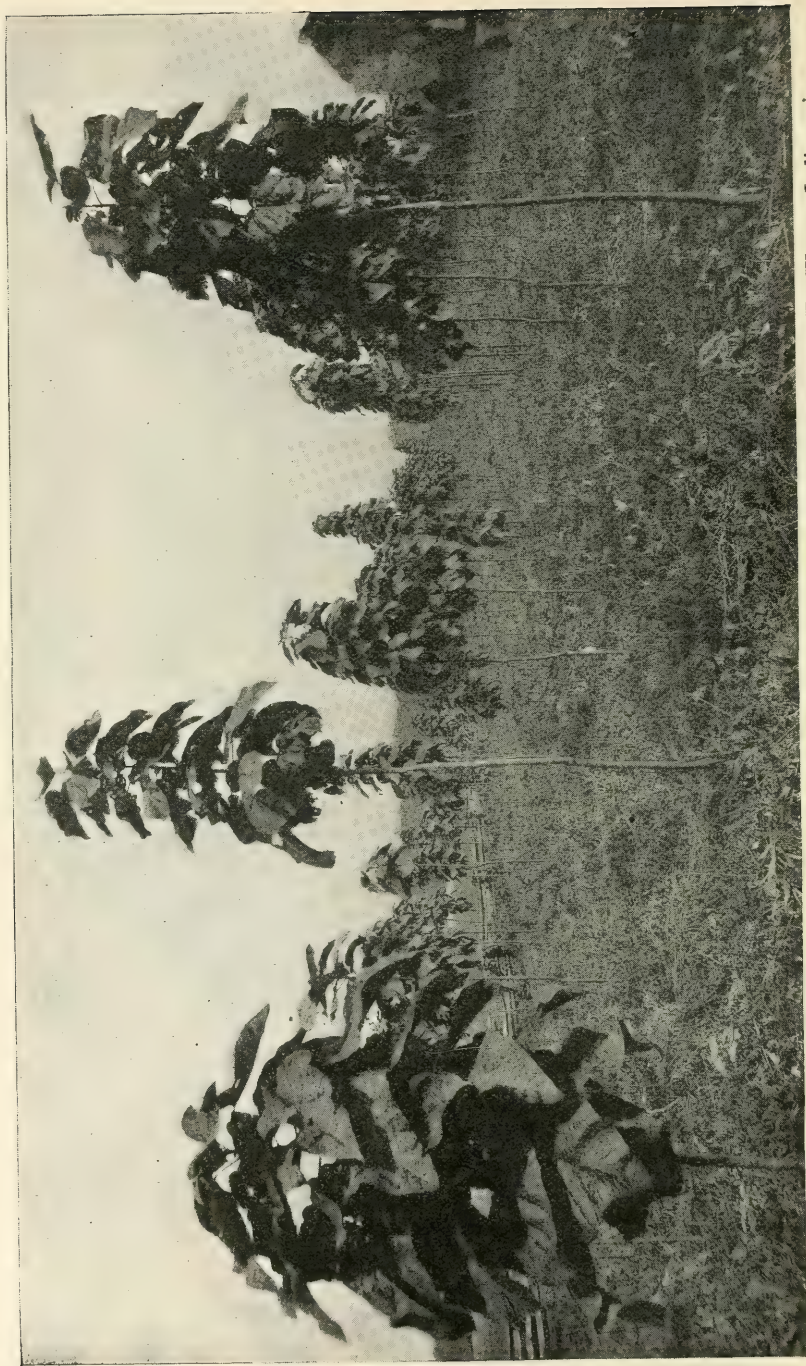


Fig. 24. Catalpa planting three years old, on farm of A. K. Kennert, six miles north of Ft. Wayne, Indiana.

from specimens collected from this planting, and show the general nature of the injury to young trees.

Figure 26. Black walnut planting near Frankfort, Indiana. The trees are fifteen years old and had reached a diameter growth of from two to six inches. They were planted in rows fourteen feet apart and the trees were from six inches to two feet apart in the rows. The planting was growing vigorously but was in great need of thinning. Many small trees were being suppressed and stunted in growth by the dense shading and general crowded condition. The soil was a deep black loam, suitable in every way for such a planting.

Figure 27. The cottonwood growth represented in this photograph was serving effectively as a wind break to the farm buildings of James Mackentire. The planting was located about 100 yards to the northwest of the group of buildings and its effectiveness has been appreciable for several years. The trees are now thirteen years old, being planted to their permanent location from one year old cuttings. They are in rows 18 feet apart and range from 10 to 12 feet apart in rows. They were from 6 to 12 inches in diameter and had been allowed to branch low, thus forming dense heavy crowns, which would make them more effective against the wind. This is an example of where one of our most common trees, of somewhat low commercial value, has been utilized for a definite and valuable purpose on account of its rapid and persistent growing.

Figures 28, 29 and 30 show various conditions of a black walnut planting on the farm of J. C. Birdsell, two miles east of South Bend, Ind. This planting of one hundred thousand trees was made about twenty years ago. It was reported upon by Mr. Stanley Coulter in his catalogue of the "Flowering Plants of Indiana," published in 1899. At that time, when the trees were only a few years old, they were said to be of good size and of thrifty appearance. The soil being thin, containing considerable sand and underlain directly by sand and gravel, was noted as being apparently favorable to the development of black walnut.

The trees being only a few years old when the above mentioned report was made, had not made sufficient growth to show the marked effect of the unfavorable conditions of soil and climate. Figures 29 and 30, which are photographs of this same planting, give conclusive evidence of the conditions under which these trees have been struggling. Figure 30 shows one of the isolated groves so characteristic of this planting. These scattered groves have de-

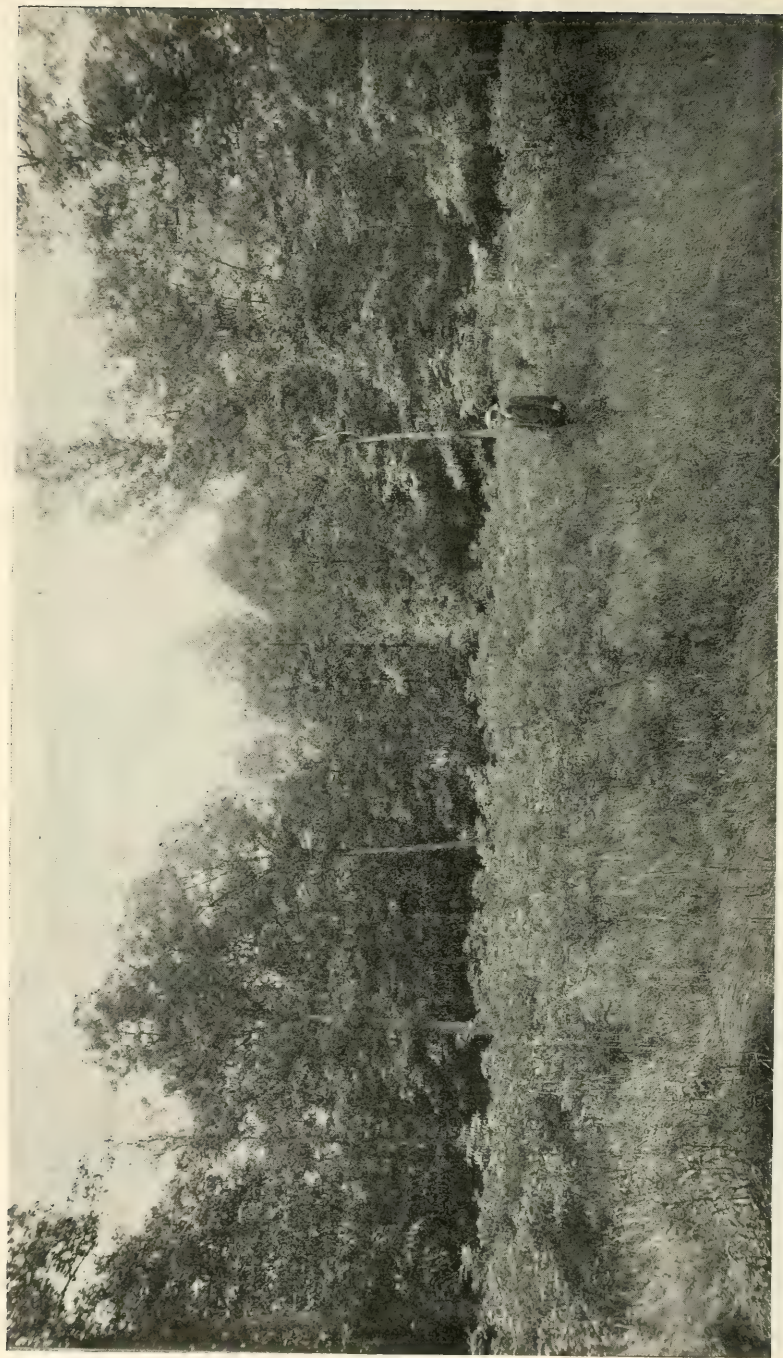


Fig. 25. Planting of Black Locust in edge of woods, on farm of J. H. Gerding, six miles west of Ft. Wayne, Indiana. Young Locust trees in foreground of picture.

veloped fairly well as a result of slight depressions in the land, where the soil is deeper, contains less sand and more moisture. Figure 28 represents the conditions along one side of the planting where the soil is richer and the ground lowest. Figure 30 was taken from the highest point in the planting and gives a more general idea of the unevenness of the growth as a whole. Note the low dwarfed forms in the foreground and the gradual increase in size and thriftiness as the lower, less sandy ground is approached. Figures 28, 29 and 30 may be compared with Figure 26, which is a planting of black walnut with soil and climatic conditions entirely different. The difference in results of a fifteen-year growth in a deep, rich sandy loam and a twenty-year growth in a thin sandy soil, in a locality exposed to the cold north and northwest winds, is well brought out by comparing these two plantings.

“The ideal conditions for growth of the black walnut are found in the rich, moist soil of bottom lands or on fertile hillsides which are protected from cold, sweeping winds. A calcareous soil or a sandy loam, containing a large quantity of humus, overlying a deep subsoil of gravel, and a water table in which the long taproots can find a continual supply of moisture, furnishes the best conditions for growth. The surface soil should be moist, but not wet, and the subsoil porous.

“While not especially adapted to widely varying conditions, the black walnut will grow in many localities outside of its natural range; but its form and rate of growth are appreciably affected by its environment. Throughout the entire Middle West, south of the forty-fifth parallel, planting on limited areas may be attempted with fair prospects of success on all fertile prairie lands, and especially in coves, valleys and extensive bottom lands where the requisite moisture is present and partial protection from the wind can be had. This latter requirement may be secured by starting the plantation in the lee of a natural wind-break or by planting a shelter belt of hardy rapid-growing species on the exposed sides.”
—United States Department of Agriculture, Forest Service Circular 88, page 2.

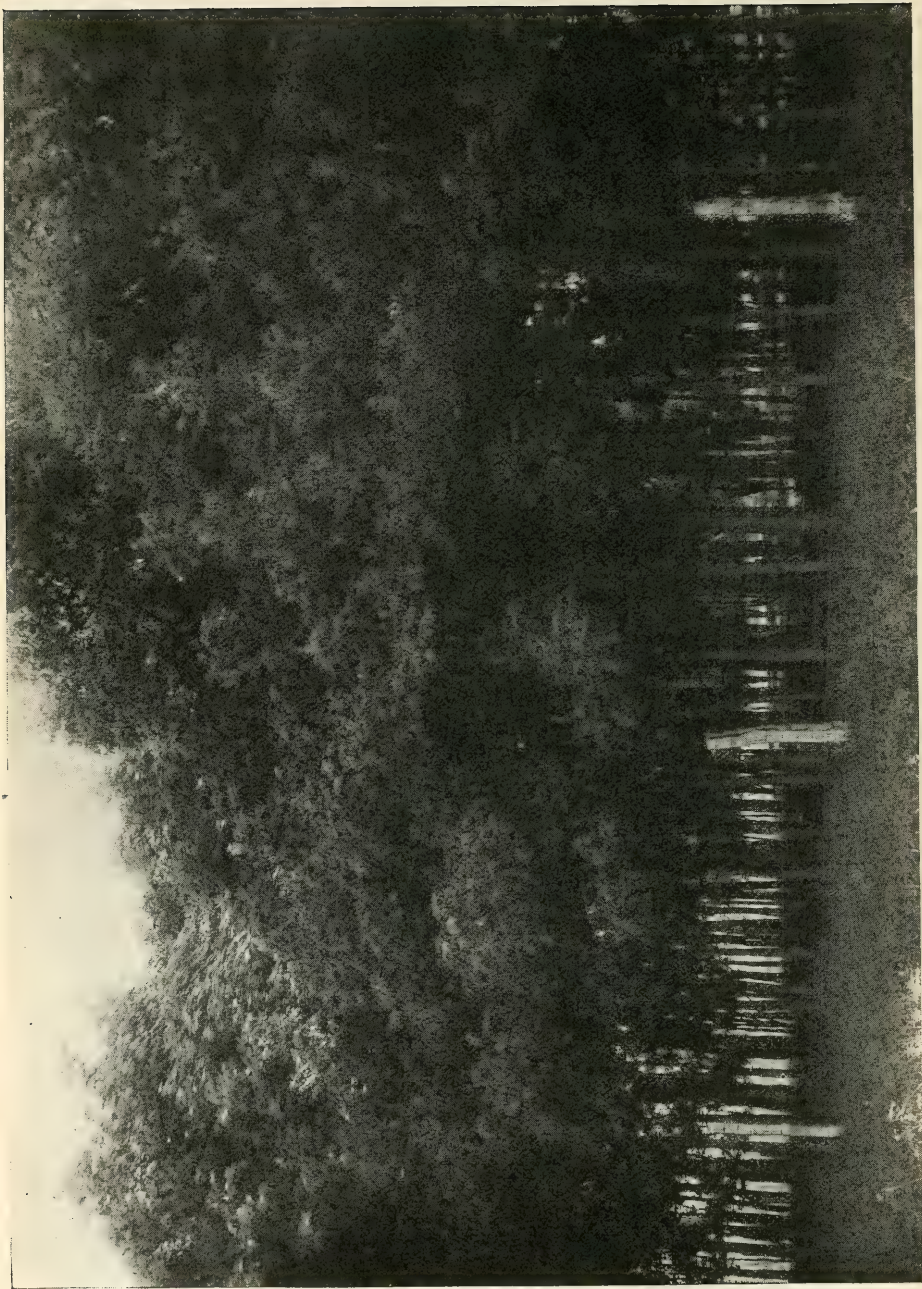


Fig. 26. Fifteen year old Black Walnut planting, on farm of Anna Congleton, three miles southwest of Frankfort, Indiana.



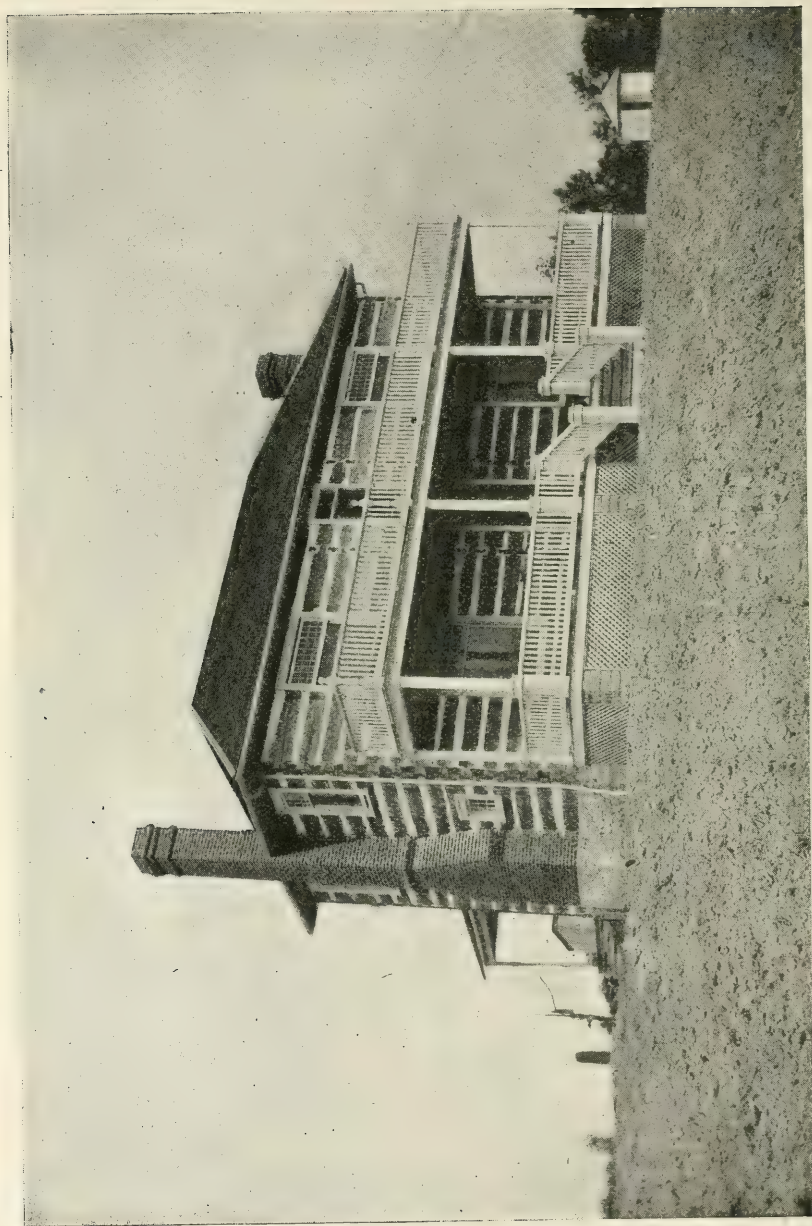
Fig. 27. Wind break or shelter belt of Cottonwood (*Populus deltoides*), on farm of James Mackentire, two miles southeast of Frankfort, Indiana.



Fig. 28. Black Walnut planting, on farm of J. C. Birdsell, two miles east of South Bend, Indiana.



Fig. 29. Same planting as shown in Fig. 28. Note unevenness in growth of trees.



Log Administration Building at State Forest Reservation.

Report of Work Accomplished

AT THE STATE FOREST RESERVATION AND EXPERIMENTAL
STATION, HENRYVILLE, CLARK COUNTY, INDIANA,
TO DECEMBER 1, 1907.

Improvements.—The different improvements as: Custodian's residence and administration buildings, roadways, forest cleaning, field planting and field cultivation which were begun three years ago have been advanced to almost completion this past year.

The new log residence and administration building for the use of the Board and Custodian is fully completed and occupied. This structure is of hewed oak logs and simply well chinked and daubed and contains six large rooms, and therefore ample for the needs. By the use of sliding partitions eight rooms may be made. The building is fitted with a fifty candle power acetylene gas plant apparatus for illumination, with extensions for outbuildings when needed in the future. Concrete walks were built and cistern and well dug and fully completed in good style. A splendid barn suitable for six horses, and also outbuildings, were completed. The accommodations which were so sadly needed are now satisfactorily arranged conveniently to railway accommodations. The Indianapolis and Louisville Electric Railway now operating crosses the eastern border of the lands of the Reservation and a permanent station stop for the convenience of the public and Institution travel has been arranged near the headquarters buildings. By this arrangement visitors may come and go at any hour of the day.

The buildings at the northwest and south central parts of the Reservation which were contemplated by the Board and provided for with appropriations by the General Assembly of 1905, were abandoned and the money so appropriated was unexpended. The Board considered that this was a prudent thing to do inasmuch as more money became necessary for the improvements northeast than were expected at the time of taking up the work there. The idea was to centralize the building expense upon the northeast part of the Reservation and abandon the other improvements until such a time as made them more necessary.

The road building which has been in progress also for the past

three years was very greatly advanced this past year. The system of roadways extending across the Reservation and connecting the old and the new administration buildings and affording a connection route with the public highways extending along the eastern and southern borders was greatly improved by grading, drainage and gravelling. Another year will find this system of roadways in a splendid condition for all year use. These roads must be made in good condition or hauling cannot be done upon them during winter and rainy times of the year, and consequently this work will be extended at every opportunity until completed.

The forest cleaning was continued throughout last winter from December 1st to March 1st. At the latter date the work of pruning and cutting was discontinued until last August, when the work was resumed, and will be continued the remainder of the winter until spring. Nothing of cutting and pruning in forest cleaning is performed during the period of time from March 1st to August 1st, because of the sap season which occasions intense sprouting, the souring and rotting of the timber and the increased stimulus for attacks of beetles, borers and other forest insects. The same plans of cleaning and sale of product as that of former years are followed. (See pages 19-21, Fifth Annual Report.)

The field planting to trees and seeds as outlined in last year's report (page 25), was completed as fully as planned. The results of growth the past year were far in advance of any former ones, because of the most excellent growing conditions prevailing. It is the aim to complete the first planting of the fields this fall and next spring. Future tree and seed plantings will then be confined to replanting vacancies that may occur in the fields and to restocking the sparsely covered woodlands as they shall require.

The State nursery features, as outlined at the time of the origin of the Reservation and Experimental Station, are now getting well developed, and it is hoped to be able to distribute a good many trees the coming year. This feature has not been reached as soon as it could have been, for the reason that it was deemed advisable to use the nursery stock toward completing the plantings at the Station first, and get it in such a stage of advancement as to receive recognition from the experimental consideration first, and then take up the tree distribution. There is now growing at the Station a good amount of nursery stock and it will be sent out as soon as ready to those desiring it. The aim will be to distribute generally and not so as to interfere with the legitimate and rightful nursery trade and business. It will be conducted in the interest of all concerned

and rather to stimulate the nursery business than hinder it. The end sought will be increased interest and desire to secure and plant more trees.

The experimental forestry attempts at the Reservation are far better than was predicted by those who questioned and were not enthusiastic over the project of the State's making the effort. It is firmly believed by those who are familiar and in sympathy with the forestry movement, that the greatest good will result to posterity by the State's endorsement and engagement in experimental conduct for the education of its generations in the subject of forestry.

As evidence of the successful forestry attempts the following statistical tabulations by E. E. Davis, of Wabash College, and taken at the Experimental Station under the direction of the Superintendent the past summer, are here submitted after the following economic discussion:

THE ECONOMIC PROBLEM AND SOME EXPERIMENTS.

At the time of the establishment of the Forest Reservation and Forestry Experimental Station in Clark County, 1903, by the State Board of Forestry, the objects of the institution were fully stated by the press, and also in the annual reports mailed from the office of the Board. Also, throughout the time of the agitation and the obtaining of the legislative enactment to secure the land purchase and the accompanying appropriations, the aims and objects were fully stated as the demonstration of practical forestry upon the cheap, broken nonagricultural lands so abundant in the southern half of the State. The foundation principle was the idea of economy and industrial good by utilizing the more than 600,000 acres of such lands for the production of wood product for the use of the manufacturing industries, which land is most admirably adapted to timber growing, but is not so devoted under a system of silviculture, but is left to waste and destruction.

At the very inception of the project the Board sincerely believed that forestry was an essential and vital element in such an economic consideration. To that end the land was sought, secured and is being devoted, and the Board sees no cause for changing its plans and conclusions formed at that time.*

The tract of land secured was the best type of such land that

*See "Circulars" Nos. 97, 116 and 52, by the United States Department of Agriculture, and the article by the "Indianapolis Morning Star" of date October 28, 1907, all of which are published elsewhere in this report. These publications treat directly of this economic problem fully as was in the minds of the Board at that time. Also see Annual Reports by the Board of Forestry, 1903-1906.

could be found (see p. 27, Report 1905, and pp. 19-26, Report 1903). The following experiments of tree growing upon such lands and which were taken at the Forestry Experimental Station, as shown by the tabulations following this discussion, indicate that such lands are well suited to practical forestry enterprise. Germany has satisfactorily worked out forestry experiments upon such lands under its government and the statements following are facts from German foresters who know what they are saying:

The average wood production upon such nonagricultural lands, when not grown under a silvicultural system, is 10 cubic feet per acre annually, or 80 B. M., which at the average price of lumber, \$15.00 per M = \$1.20 annual increment value per acre. Under systematic management such lands can be made to produce annually 40 cubic feet of wood or 320 B. M., which at the average price of lumber, \$15.00 = \$4.80 increment value per acre. These statements must not be taken as idle speculations, but as facts, and should appeal to individuals, corporations and governments for investment projects of splendid merit.

At the above ratios the waste lands of Indiana have the following possible values if devoted to forestry uses, besides the industrial good resulting from a stable wood product supply for manufacturing interests and labor:

Six hundred thousand acres uncultivated at 10 cubic feet per acre = 6,000,000 cubic feet or 48,000,000 B. M. at the average price of lumber, \$15.00 per M = \$720,000.00 annual increment value.

Six hundred thousand acres cultivated at 40 cubic feet per acre = 24,000,000 cubic feet or 192,000,000 B. M. at the average price of lumber, \$15.00 per M = \$2,880,000.00. A difference of \$2,160,000.00 to pay for the systematic control of such lands, besides a quantity of 144,000,000 B. M. in product.

It was upon such a basis of reasoning that the Board decided the plan of object lessons in practical forestry that it is now conducting, well knowing it to be the surest way to establish the principles of forestry in the minds of the citizens of the State, and further believing that if its ideas were backed by facts of completed forestry experiments that such lands which are now almost idle waste would, in course of time, be sought for forestry investments and the economic problem of wood supply for the industries and the utilization of such lands to the greatest advantage would be solved.

In these conclusions the Board fully appreciated the fact that years of time, the greatest patience and a most devoted perseverance would be necessary, but it believes that all its conclusions are both

probable and possible. It remains for the people to determine whether to act for its own welfare and that of the future. Such a course of philanthropic conduct is due as an element of justice to future generations by the present.

The economic features herein are the same as now promulgated by the National Department of Forestry in its efforts to obtain governmental control of the Appalachian highlands. (For a full discussion of the same see Circulars 97 and 116, by U. S. Department, pp. 132 and 147.)

Without a further discussion of the possibility of forest growing upon the cheaper lands and its industrial value the Board calls attention to the following tabulations by E. E. Davis, of Wabash College, which were taken at the Forest Reservation in Clark County, under the direction of the superintendent. These experiments are the first statistics taken of the attempts and indicate the success so far. It is the aim to retake the measurements in the course of five years and make the comparative estimates to show the increment of wood per acre. More and larger areas were not taken, because of the expense connected in view of the limited funds for office expenses allotted the department. The areas given are typical sections of the whole of which the part taken belongs. Not all the experiments in progress were taken because of the lack of means to conduct the work. Many areas were omitted at this time, but will be taken up next year.

Plat No. 1 is an experiment of reforesting an open field to American ash from seed planting. This field was consecutively farmed for more than fifteen years and until all traces of forest humus were gone. The field was regularly prepared as for corn planting and the seeds drilled thickly in rows during November, 1904 (see Fourth Annual Report, 1904, page 16, planting 6). This planting was given but limited cultivation. The fall of 1906 all the seedlings were dug and transplanted to other fields, except the stand retained as shown by the tabulations which were left to form a permanent forest stand.

Soil loose, porous, sandy clay. Elevation, 520 feet. Approximate trees per acre 1,720.

Plat No. 1. One-fourth Acre White Ash Seedlings.

Line 1 N. W. 80 2.5 chains.

Line 2 S. W. 10 2 chains.

Line 3 N. W. 42 3.25 chains, 1 link.

Height in Inches.	Straight Stem to Top.	Forked Stem.	Height, Inches to Fork.	Seconds.
10	2	..	..	..
11	1	..	..	..
13	1	..	..	..
15	5	..	..	..
17	2	1	12	..
18	5	..	..	..
19	1	..	..	..
20	3	1	16	1
21	7	..	..	..
22	5	..	..	..
23	5	..	..	..
24	4	2	6, 10	1
25	9	..	..	..
26	4	..	..	..
27	11	1	17	..
28	7	..	..	1
29	4	..	..	..
30	2	..	..	1
31	9	..	..	..
32	8	1	20	..
33	8	..	23, 17	..
34	11	..	..	..
35	9	1	20	..
36	19	1	19	2
37	15	2	13, 19	2
38	13	..	..	..
39	15	..	..	2
40	13	3	25, 25, 15	..
41	9	..	..	..
42	19	1	19	1
43	12	..	..	..
44	10	1	20	1
45	8	2	20, 20	..
46	12	1	39	..
47	12	..	..	..

Height in Inches.	Straight Stem to Top.	Forked Stem.	Height. Inches to Fork.	Seconds.
48	13	1	25	..
49	9	..	..	..
50	14	1	24	1
51	11	2	27, 15	1
52	11	1	40	1
53	7	..	..	..
54	5	1	24	..
55	5	1	41	1
56	5	3	41, 44, 27	..
57	9	1	27	..
58	4	1	28	..
59	1	1	35	..
60	4	1	31	..
61	4	..	..	..
62	3	..	..	..
63	1	..	..	..
64	2	..	..	..
65 .....	..	..	..	..
66 .....	..	..	..	..
67 .....	..	..	..	..
68	1	..	..	..
69 .....	..	..	..	..
70	2	..	..	..
71 .....	..	..	..	..
72	1	..	..	..
	<hr/>	<hr/>		<hr/>
	382	32		16
Total				430

Plat No. 2 is an experiment at reforesting an old field to mixed oak by planting the acorns. This field is the same as indicated in plat No. 1, ash planting, and planted at same time and in same manner. The treatment is the same throughout for both plantings, and all the soil conditions are the same. This experiment shows a far less growth rate and tree stand. Damping off was very great and was even so the past summer. The results from transplanting oak seedlings are bad and indicate the oaks must be grown from seed planted where it is aimed for the tree to grow.

The approximate trees per acre 836, which is not at all discouraging for oak propagation on old fields. It must be remembered, however, that a small oak seedling 6 or 8 inches high of stem may have a root from 3 to 5 feet long and almost a load for a man to carry. They grow slowly and scrubby until the root foundation is established.

Plat No. 2. One-half Acre Mixed Oak Seedlings.

Line 1 N. E. 10 2.5 chains.

Line 2 N. W. 80 2 chains.

Line 3 N. E. 10 2.5 chains.

Line 4 N. W. 80 2 chains.

Height in Inches.	Prime.	Seconds.
5	5	1
6	9	2
7	12	2
8	17	3
9	19	2
10	18	3
11	13	3
12	22	4
13	19	3
14	20	1
15	17	2
16	19	1
17	14	2
18	19	1
19	8	2
20	14	5
21	11	1
22	13	2
23	6	..
24	11	1
25	14	1
26	13	3
27	12	4
28	5	1
29	4	..
30	7	1
31	8	1
32	3	..
33	8	2
34	5	..
35	2	..
37	5	..
38	4	..
40	2	..
42	4	..
43	1	..
46	1	..
Total		418

384 54

Plat No. 3 is an experiment at reforesting an old field to tulip poplar by transplanting upon it seedlings of one year's growth and of 15 to 24 inches' height. These seedlings were purchased in Tennessee from a locality having similar soil characteristics to that of the area planted. They were secured in the fall of 1906 and stored over the winter and planted early in April, 1907. At time of planting a mule team and plow were used to make a wide, deep furrow across the field. Men with arm loads of trees followed and placed them, drawing dirt with their feet upon the roots to hold them in place and then a mule and plow completed the covering by turning a furrow of dirt upon them from both sides. It became necessary to straighten up and rearrange some of them after covering with the plow. Three men and a team can plant 4,000 seedlings per day in this manner.

The result of this work to date is almost perfect, as not 25 trees out of 20,000 planted in this field failed of growing this summer, and all indications point to their continuance. Soil porous, sandy and gravelly loose clay; 520 feet elevation and natural rolling drainage. Approximate trees per acre 1,718.

Note.—Twenty thousand American ash were planted in same manner and the results are equally as good.

Plat No. 3. Tulip Poplars. Seedlings Planted, Spring 1907. One-half Acre.

Line 1 S. E. 24 2.5 chains.

Line 2 S. W. 56 2 chains.

Line 3 S. E. 24 2.5 chains.

Line 4 S. W. 56 2 chains.

Height, Inches.	Terminal buds and stems damaged by shipping improperly and thus had to be cut back at planting.	Trees not Damaged in Shipping.
5	36	..
6	32	..
7	28	..
8	38	..
9	45	..
10	53	..
11	53	..
12	63	1
13	63	..
14	59	1
15	55	2
16	61	3
17	46	4
18	40	7
19	36	8
20	29	3
21	16	6
22	15	11
23	13	5
24	14	3
25	10	9
26	5	1
27	5	1
28	5	..
29	4	3
30	3	1
31 .....	..	..
32 .....	..	..
33 .....	..	1
34 .....	..	..
35 .....	..	..
36 .....	..	..
37 .....	..	..
38	1	1
788		71
Total		859

Plat No. 4 is an experiment at reforesting an old open field with black walnut by planting the seed. This field was planted in the fall of 1905. (See Fifth Annual Report, page 20.) The missing places were filled in this last spring, 1907, by planting American ash seedlings. The soil and conditions are same as given for plat No. 3.

Approximate trees per acre, 1,774.

Plat No. 4. Black Walnut, filled in with White Ash. One-half Acre.

Line 1 S. W. 13 2.5 chains.

Line 2 N. W. 77 2 chains.

Line 3 S. W. 13 2.5 chains.

Line 4 N. W. 77 2 chains.

Height, Inches.	Walnut. Total-H.	Stem- Sec.	Ash. Total-H.	Stem- Sec.
5	5	..	..	..
6	4	..	..	..
7	10	..	..	..
8	16	1	..	..
9	27	1	1	..
10	28	2	..	..
11	31	3	..	1
12	26	..	1	..
13	29	..	..	..
14	30	1	3	..
15	32	1	5	..
16	25	..	9	..
17	34	1	2	..
18	31	5	14	2
19	35	1	13	1
20	32	4	16	2
21	27	..	12	..
22	23	1	15	..
23	25	..	8	..
24	31	2	9	1
25	24	..	11	1
26	13	..	12	..
27	11	..	13	2
28	10	..	7	..
29	7	..	11	..
30	6	..	11	..
31	5	..	9	..
32	3	..	7	..
33	1	..	5	..
34 .....	..	..	10	..
35 .....	..	..	9	..
36 .....	..	..	7	..
37	2	..	6	..
38	1	..	7	..
39 .....	..	..	4	..
40 .....	..	..	5	..
41 .....	..	..	2	..
42 .....	..	..	5	..
43 .....	..	..	1	..
44 .....	..	..	3	..
45 .....	..	..	4	..
	584	23	271	9
Total				887

Plat No. 5 is an experimental planting for the same purpose as that of No. 4, and planted the fall of 1904, but on a field with different drainage and soil conditions. The soil of this field is less sandy, gravelly and porous and is low, level in drainage and consequently the trees have not done so well. Owing to the wet condition of the soil grass sod has formed and made cultivation more difficult and the growth of the trees has not been so good.

Elevation 520 feet. Average trees per acre, 1,536.

Plat No. 5. Black Walnut. One-half Acre; Pure Stand.

Line 1 N. W. 38 2 chains.

Line 2 S. W. 52 2.5 chains.

Line 3 N. W. 38 2 chains.

Line 4 S. W. 52 2.5 chains.

Height, Inches.	Straight Stem-H.	Forked Stem, Total-H.	Stem to Fork.	Sec.
5	68	..	12	2
6	44	..	11	1
7	70	2	17	2
8	102	4	9	3
9	116	7	18	4
10	74	3	11	2
11	70	7	10	1
12	62	18	5	2
13	40	9	5	2
14	31	4	4	..
15	28	10	2	..
16	23	9	3	1
17	16	9	..	1
18	12	1	1	1
19	8	4	1	1
20	11	6	..	..
21	10	1	1	1
22	2	3	..	..
23	4	..	..	..
24	4	2	..	..
25	5	..	..	..
26	5	3	..	..
27 .....	..	..	..	..
28 .....	..	2	..	..
29	3	..	..	..
30 .....	..	1	..	..
31	1	2	..	..
32	1	..	..	..
33 .....	..	..	..	..
34 .....	..	1	..	..
35	1	..	..	..
36	1	..	..	..
37	2	..	..	..
42	1	..	..	..
45 .....	..	1	..	..
635		109		24
Total				768

Plats "6A" and "6B" are experiments of the natural reproduction of hardwoods upon an abandoned new-ground field which was cultivated to corn and tomatoes jointly during three seasons and last during the summer of 1903. When the crop was removed it was permitted naturally to grow up to trees. This last September, 1907, it was given the forest cultivation clearing. The tabulations given in the tables, "6A" and "6B," show the prime stand of trees retained at cultivation. The count was taken in two different parts of the field and shows an average of 1,135 trees per acre.

Soil, porous sandstone clay. Elevation, 590 feet. Natural rolling surface drainage.

Plat No. 6A. Natural Reproduction Hardwoods. One-half Acre.

Line 1 W. 1 N. 2.5 chains.

Line 2 S. 1 E. 2 chains.

Line 3 W. 1 N. 2.5 chains.

Line 4 S. 1 E. 2 chains.

Height, Feet.	Oak.	Hickory.	Walnut.	Maple and Ash, Mixed.	Gum.
2 .....	..	2	..	..	..
2.5	1	1	1	..	..
3 .....	..	16	2	..	1
3.5	1	17	2	..	..
4	7	44	..	..	..
4.5	3	51	1	..	1
5	11	67	3	2	1
5.5	8	35	1	..	2
6	10	40	..	..	..
6.5	12	22	..	..	..
7	15	15	2	1	1
7.5	14	6	1	..	2
8	25	3	..	..	2
8.5	5	..	..	1	..
9	7	2	..	1	..
9.5	8	..	..	..	..
10	7	..	..	..	..
10.5	3	..	..	1	1
11	2	..	..	..	..
11.5	1	..	..	..	..
12	3	..	..	..	..
	<hr/> 143	<hr/> 321	<hr/> 13	<hr/> 6	<hr/> 11
Total					494

Plat No. 6B. Natural Reproduction Hardwoods. One-half Acre.

Line 1 N. 13 W.

Line 2 W. 13 N.

Line 3 N. 13 W.

Line 4 W. 13 N.

Height, Feet.	Oak.	Hickory.	Walnut.	Gum.	Mixed.	
1 .....	..	..	..	..	..
1.5 .....	..	2	..	..	..
2 .....	..	4	..	..	..
2.5 .....	..	8	..	..	..
3	2	4	1	..	..
3.5	1	8	..	..	1
4	3	33	..	..	2
4.5	7	46	..	1	..	
5	14	60	1	1	..	
5.5	18	50	2	..	..
6	25	43	1	1	2	
6.5	22	43	..	..	1
7	31	36	..	1	..	
7.5	19	15	1	..	1	
8	30	11	..	..	..
8.5	14	2	..	..	..
9	17	1	..	..	..
9.5	16	..	..	..	..
10	6	..	..	..	1
10.5	10	..	..	..	2
11	6	..	..	..	..
11.5	3	..	..	..	..
12	7	..	..	..	..
13.5	3	..	..	..	..
15	1	..	..	..	..
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	
	255	366	6	4	10	
Total						641

Plat No. 7 is an experiment for natural reforestation upon a tract of fire-burned area which was cleared off after being burned over and then left, to reforest naturally.

The area of which this is a part was burned over in 1902 and cleared off the winter of 1903. The soil of this tract is hard sandstone clay and of 670 feet elevation. Approximate trees per acre, 1,618.

Plat No. 7. One-half Acre.

Line 1 N. W. 34 2 chains.

Line 2 N. E. 56 2.5 chains.

Line 3 N. W. 34 2 chains.

Line 4 N. E. 56 2.5 chains.

Height, Feet.	Oak.	Hickory.	Maple.
2	..	3	..
2.5	..	2	..
3	..	2	..
3.5	..	3	..
4	2	8	..
4.5	1	16	1
5	..	19	..
5.5	7	24	..
6	7	29	1
6.5	11	33	..
7	16	47	1
7.5	13	53	2
8	22	54	..
8.5	19	43	1
9	31	33	..
9.5	24	24	..
10	40	28	2
10.5	27	18	1
11	23	11	3
11.5	20	5	2
12	20	1	3
12.5	6	4	..
13	9	1	..
13.5	3	..	..
14	8	..	..
14.5	5	..	..
15	9	..	..
15.5	4	..	..
17	2	..	..
18	2	..	..
	331	461	17
Total	809		

Plat 8B. Lower Story Species. One Acre.

Line 1 N. W. 37 3 chains 16,062 links.

Line 2 S. W. 53.

Line 3 N. W. 37.

Line 4 S. W. 53.

Height. Feet.	Oak.	Hickory.	Gum.	Mixed—Tulip, Maple, Beech, Chestnut.
1	36	83	10	8
1.5	41	95	24	8
2	63	130	34	19
2.5	36	53	30	30
3	34	42	44	13
3.5	22	30	31	21
4	20	20	36	18
4.5	17	16	17	15
5	12	16	8	15
5.5	8	7	3	4
6	8	6	4	3
6.5	5	8	1	2
7 .....	..	8	..	3
7.5 .....	..	8	1	1
8 .....	..	6	..	3
8.5	1	6	..	..
9 .....	..	2	..	1
9.5 .....	..	1	..	..
10 .....	..	2	..	..
10.5 .....	..	4	..	2
11.5 .....	..	2	..	..
12 .....	..	1	..	..
12.5 .....	..	1	..	..
13	1	..	2	..
13.5 .....	..	3	..	..
14	2	..	..	..
14.5 .....	..	1	..	..
15	6	..	..	2
15.5	4	2	..	..
16	3	..	..	..
17	1	..	..	..
17.5	1	..	..	..
18	2	..	..	1
19	1	..	..	..
20	11	..	..	3
	<hr/> 335	<hr/> 533	<hr/> 245	<hr/> 172
Total				1,285

Plat No. 9 "A" and "B" is an experiment at obtaining a second story or undergrowth of trees beneath a top or larger growth. The area of which "A" and "B" are a part was given the forest cleaning the fall of 1905. This tract was so badly devastated that at the completion of the cleaning cultivation scarcely anything remained, but the second story growth as shown by "A" is very good. There is danger of the soils when too much exposed to the sun of burning out and the second story forest does not materialize. This tract is on blue sandstone clay of hard compact form and with an elevation of 650 feet.

Plat No. 9. One Acre.

Line 1 N. E. 30 3 chains 16.062 links.

Line 2 S. E. 60.

Line 3 N. E. 30.

Line 4 S. E. 0.

A.					B.				
<i>Lower Growth.</i>					<i>Upper Growth.</i>				
Height, Feet.	Hick- ory.	Oak.	Other Species.	Total.	Diam.. In.	Hick- ory.	Oak.	Gum.	Total.
3.....	32	34	7	..	2.....	..	5	..	..
4.....	21	52	25	..	3.....	1	5	..	..
5.....	18	48	22	..	4.....	2	8	..	..
6.....	53	37	12	..	5.....	1	13	..	..
7.....	85	28	4	..	6.....	2	4	..	..
8.....	103	32	2	..	7.....	2	12	..	..
9.....	129	23	4	..	8.....	..	8	..	..
10.....	94	14	2	..	9.....	2	5	..	..
11.....	86	7	1	..	10.....	..	1	..	..
12.....	79	9	4	..	11.....	..	2	..	..
13.....	16	5	2	..	12.....	..	1	..	..
14.....	4	4	..	..	13.....	..	2	..	..
15.....	1	4	1	..	14.....	..	1	..	..
16.....	..	..	..	..	15.....	..	..	..	..
17.....	..	2	..	..	16.....	..	1	..	..
					17.....	..	..	..	..
					18.....	..	..	1	..
					19.....	..	..	..	..
					20.....	..	..	..	..
					24.....	..	1	..	..
	761	299	86	1,146		10	69	1	80
				80					

Upper and lower growth. 1,226

Plat. No. 10 is an experiment giving the number of standing hardwood trees per acre after the forest cleaning was applied. There has been near 380 acres so treated and this experimental tract is an average for the lot. This forms the upper story forest and will be removed when it attains a suitable commercial size and the lower story forest indicated which follows the cultivation will succeed it and so on forest perpetuation is accomplished on such lands.

Plat No. 10. One Acre. Old Growth.

Line 1 S. W. 55 3 chains 16.062 links.

Line 2 N. W. 35.

Line 3 S. W. 55.

Line 4 N. W. 35.

Dia., In.	White Oak.	Black Oak.	Red Oak.	Ches. Oak.	Hickory.	Gum.	Pine.	Total.
2	48	3	1	17	3	..	..	72
3	40	8	3	21	1	..	..	73
4	32	10	..	23	1	1	..	67
5	11	10	1	15	..	..	..	37
6	7	4	3	10	3	..	..	27
7	4	8	1	10	1	..	1	25
8	1	8	1	5	2	..	1	18
9	2	2	2	3	5	..	..	14
10 .....	..	1	..	..	2	..	..	3
11 .....	..	..	..	2	2	..	..	4
12	1	1	..	..	1	..	..	3
13 .....	..	..	..	..	1	..	..	1
14 .....	..	..	..	..	..	..	..	..
15 .....	..	..	..	..	..	..	..	..
16 .....	..	..	..	..	..	..	..	..
17 .....	..	..	..	..	..	..	..	..
18 .....	..	1	..	..	..	..	..	1
	<hr/> 146	<hr/> 56	<hr/> 12	<hr/> 106	<hr/> 22	<hr/> 1	<hr/> 2	<hr/> 345

Plat No. 11 is an experiment at natural reforestation upon a tract cleared off and farmed two seasons to corn and then permitted to grow up. The area of which this plat is a part was last farmed in 1901. It was given the forest cultivation in the winter of 1904. The tabulations show the result. This area has hard blue sandstone clay soil and elevation 620 feet. Drainage natural rolling. Approximate trees per acre, 2,998.

Plat No. 11. One-half Acre Natural Reproduction in Abandoned Field.

Line 1 S. W. 54 2.5 chains.

Line 2 N. W. 36 2 chains.

Line 3 S. W. 54 2.5 chains.

Line 4 N. W. 36 2 chains.

Height, Feet.	Oak.	Chestnut.	Gum.	Mixed.	Hickory.
4	6	..	1	..	33
5	16	..	7	1	67
6	16	..	5	3	105
7	37	2	7	7	129
8	56	..	5	6	170
9	34	1	3	5	129
10	51	2	2	5	87
11	55	1	4	2	97
12	80	5	5	3	71
13	55	2	..	..	14
14	35	3	..	2	8
15	30	..	..	..	1
16	10	..	..	..	..
17	7	..	..	..	..
18	9	..	..	..	..
19	1	..	..	..	..
20	1	..	..	..	..
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	499	16	39	34	911
Total					1,499

Plat No. 12 shows an exceptionally good White Oak stand of trees upon a tract of natural forest which has been given the forest cultivation. The greater part of the land so cultivated possesses a good White Oak stand as shown in the tabulations. It is the predominating species throughout.

Elevation of plat No. 12 is 630 feet. Soil, blue sandstone clay.

Plat No. 12. One Acre. Woodland.

Line 1 S. E. 38 3 chains 16.062 links.

Line 2 N. W. 52.

Line 3 S. E. 38.

Line 4 N. W. 52.

Dia., Inches.	White Oak.	Black Oak.	Red Oak.	Hickory.	Other Species.	%.	Total.
1	39	..	..	7	1		47
2	114	1	5	15	2		137
3	62	1	19	5	3		90
4	40	9	31	..	..		80
5	26	11	28	1	..		66
6	15	6	21	1	..		43
7	12	3	10	1	..		26
8	6	..	11	..	..		17
9	2	2	10	..	..		14
10	2	2	4	..	..		8
11	1	..	5	..	..		6
12	1	..	1	..	..		2
	320	35	144	30	6		535

Plat No. 13 is an experiment at reforesting a 40-acre field by mixed planting. This field is very good soil and has gently rolling surface. A variety of soils however, is found throughout the tract. The hickory, walnut and oak stands were obtained by planting the seeds upon the field in the fall of 1905 and the transplanting of the ash and elm seedlings was done last fall, 1906, and this last spring, 1907. This stand will be enriched by other plantings and natural growth as time will permit.

Elevation of this tract as a whole, 590 feet.

Plat No. 13. One Acre. Plantation.

Line 1 N. E. 65 3 chains 16.062 links.

Line 2 S. E. 25.

Line 3 N. E. 65.

Line 4 S. E. 25.

Height, Inches.	Hickory.	Ash.	Elm.	Gum.	Walnut.	Oak.
6	61	1	9	..	..	17
7	11	2	1	..	1	5
8	12	2	9	..	1	5
9	9	1	4	..	1	2
10	4	2	8	..	2	2
11	5	..	1	..	..	2
12	1	2	4	1	1	1
13	1	1	6	1	1	..
14	1	5	14	..	3	..
15	1	5	9	..	3	1
16 .....	..	9	4	..	2	..
17 .....	..	4	3	..	3	..
18 .....	..	12	6	1	10	..
19 .....	..	7	3	..	7	..
20 .....	..	14	3	..	13	..
21 .....	..	14	3	..	10	..
22 .....	..	13	5	..	10	..
23 .....	..	8	2	..	5	..
24 .....	..	16	1	..	10	..
25 .....	..	14	..	..	7	..
26 .....	..	10	1	..	5	..
27 .....	..	18	2	1	9	..
28 .....	..	18	1	..	9	..
29 .....	..	18	1	..	9	..
30 .....	..	12	3	..	10	..
31 .....	..	16	..	..	9	..
32 .....	..	16	..	1	9	..
33 .....	..	16	..	..	8	..
34 .....	..	16	..	..	9	..
35 .....	..	18	..	..	9	..
36 .....	..	16	1	..	8	..
37 .....	..	12	..	..	10	..
38 .....	..	12	..	..	8	..
39 .....	..	3	..	..	2	..
40 .....	..	9	..	..	7	..
41 .....	..	4	..	..	2	..
42 .....	..	3	..	..	2	..
43 .....	..	2	..	..	2	..
44 .....	..	1	..	..	..	..
48 .....	..	..	..	1	..	..
50 .....	..	..	..	2	..	..
60 .....	..	..	..	3	..	..
	106	352	104	11	217	35
Total						825

Plat No. 14 is an experiment of a tract of natural woodland which has been cultivated and shows the predominance of hickory in the stand. This tract is an example of an ordinary devastated jungle growth found upon the Reservation as well as throughout the 600,000 acres of hilly broken lands of southern Indiana and shows what is there for future forests if they are cultivated and not burned over.

The soil of this tract is heavy white and blue sandstone clay with natural rolling surface drainage. Elevation, 630 feet.

Plat No. 14. One Acre. Woodland.

Line 1 N. W. 39 4 chains.

Line 2 N. E. 51 2.5 chains.

Line 3 N. W. 39 4 chains.

Line 4 N. E. 51 2.5 chains.

Diam., Inches.	White Oak.	Red Oak.	Black Oak.	Hickory.	Other Species.	Total.
1	53	10	3	161	34	261
2	70	9	7	36	5	127
3	20	5	1	2	..	28
4	6	2	3	2	..	13
5	3	2	5	1	..	11
6	4	2	2	..	1	9
7	3	1	2	1	..	7
8 .....	..	..	2	1	..	3
9	1	..	2	..	..	3
10 .....	..	..	1	..	..	1
11 .....	..	..	1	..	..	1
12	4	..	..	..	..	4
13	1	..	..	..	..	1
	<hr/> 165	<hr/> 31	<hr/> 29	<hr/> 204	<hr/> 40	<hr/> 469

The soil of this area is purely sandstone clay of the hard shaley kind. Elevation, 820 feet. Surface broken ridges.

Diam., In.	White Oak.	Black Oak.	Red Oak.	Ches. Oak.	Hickory.	Maple.	Quaking Aspen.	Chest- nut.
1	36	31	25	93	43	22	1	51
2	34	14	31	155	11	24	4	31
3	11	1	6	70	..	2	3	6
4	4	..	1	24	..	1	1	2
5 .....	..	1	..	2	..	1	..	3
6 .....	..	..	..	3	..	..	..	2
7 .....	..	..	..	4	..	..	..	..
8	1	..	..	..	..	..	..	..
9 .....	..	..	..	2	..	..	..	..
10 .....	..	..	..	1	..	..	..	1
11 .....	..	..	..	1	..	..	..	..
12 .....	..	..	..	1	1	..	..	..
13 .....	..	..	..	..	..	..	..	..
14 .....	..	1	..	..	..	..	..	..
15 .....	..	..	..	..	..	..	..	..
16 .....	..	..	..	..	1	..	..	..
17 .....	..	..	..	1	..	..	..	..
18 .....	..	..	..	1	..	..	..	..
19 .....	..	..	..	..	..	..	..	..
20 .....	..	..	..	..	..	1	..	..
	86	48	63	258	56	51	9	96
Total								667

Plat No. 16 is an experiment of a walnut planting at the base of the knoblands upon a field cultivated for several years but not abandoned and which possessed a soil composition of porous sandy and gravelly clay suited to walnut growth and upon which field stood several good thrifty walnut trees. This field was planted to walnut seeds the spring of 1904 at distances of five feet apart and was given two plowings as cultivation per season until the past summer when they were not given any attention at all. This tract is surrounded on three sides by timbered land and consequently the squirrels disturbed the planting by digging up the walnuts and carrying them away. Thus the stand is not complete, but the acre given is the average for the tract of 6,000 trees in the planting which are growing at this time. (See Fourth Annual Report, 1904, page 12, Planting 1.)

Elevation of this tract, 700 feet. Natural rolling surface drainage.

Plat No. 16. Walnut Plantation. One Acre.

Line 1 W. 3 chains 16.062 links.

Line 2 S.

Line 3 W.

Line 4 S.

Height in Feet.	Trees	Height in Feet.	Trees.
1 .....	...	5	118
1.5 .....	...	5.5	46
2	3	6	26
2.5	61	6.5	6
3	114	7	1
3.5	185		
4	254	Total	977
4.5	163		

Plat No. 17 is an experiment of natural forest growth same plan and purpose as in No. 15. This elevation, however, is about 850 feet and is in the altitude of coniferous trees. The knob-lands grow pine successfully and another characteristic is that the other species are abundant as shown by the tabulation. However, the pines are gradually giving way to the hardwoods which form the second story forest under them. A great many young pines are coming on and regeneration by pine seems possible.

Plat No. 17. One Acre.

Line 1 N. W. 57.3 chains 16.062 links.

Line 2 N. E. 33.

Line 3 N. W. 57.

Line 4 N. E. 33.

Diam., In.	Ches. Oak.	White Oak.	Black Oak.	Red Oak.	Hickory.	Pine.	Other Species.
1	58	33	2	23	154	32	12
2	72	52	2	19	22	5	11
3	32	14	1	11	..	..	3
4	27	14	1	7	1	..	1
5	23	7	3	7	1	1	1
6	26	3	3	8	1	..	..
7	11	8	1	7	1	..	..
8	11	4	..	7	1	1	..
9	4	1	..	1	1	..	..
10	1	3	..	3	..	..	..
11	1	3	..	2	..	..	..
12	2	1	2	2	2	..	..
13	1	..	..	1	1	..	..
14	1	2	..	..	..	..	..
15 .....	..	1	..	..	1	..	..
16	1	1	..	..	..	..	..
	271	147	15	98	186	39	28
Total							784

Plat No. 18 is an experiment in the hill lands showing the land after forest cleaning. This tract is located upon the badly broken ridges at base of knobs and somewhat upon the slopes. The elevation is 850 feet and the soil formation shaley sandstone clay. This tract is so broken that agricultural farming would not be at all successful, even if the soil were suitable, but the tree growth indicates that it can successfully be devoted to forestry. The stand given is that of all the good trees after all damaged and worthless kinds are removed. It would grow three or four times this number.

Plat No. 18. One-half Acre Natural Growth.

Line 1 N. W. 31 2.5 chains.

Line 2 S. W. 59 2 chains.

Line 3 N. W 31 2.5 chains.

Line 4 S. W. 59 2 chains.

Diam., In.	Ches. Oak.	White Oak.	Red Oak.	Black Oak.	Hick- ory.	Maple.	Chest- nut.	Gum.	Other Spec.
2	65	34	5	16	6	10	31	1	4
3	21	9	1	5	3	5	13	2	5
4	6	2	..	4	..	1	4	..	4
5	3	1	..	3	..	..	..	..	2
6	6	..	..	..	..	..	..	..	..
7	2	1	1	1	1	..	..	..	..
8	3	1	2	..	2	..	..	..	..
9	2	1	..	1	1	..	1	..	..
10	1	..	..	..	..	..	..	..	..
11	1	..	..	1	..	..	..	..	..
12	1	..	..	1	..	..	..	..	..
13 .....	..	..	..	..	1	..	..	..	..
14 .....	..	..	..	..	..	..	..	..	..
15 .....	..	..	..	1	..	..	..	..	..
16 .....	..	..	..	..	..	..	..	..	..
17 .....	..	..	..	..	..	..	..	..	..
18 .....	..	..	..	..	..	..	..	..	..
19 .....	..	..	..	..	..	..	..	2	..
Total	111	49	8	33	14	16	49	5	15

Plat No. 19 is an experiment of natural forest growth upon the knoblands with an elevation of 1,000 feet. This tract was a mat of devastation and jungle treated to forest cultivation the winter of 1904. The tabulation shows the species that grow successfully. Indications at this time are good for the successful growing of the best hardwoods upon the knoblands. Time will tell the sizes and quality such timber trees will reach upon such elevation and soil. The soil of this region is sandstone clay and shale formation with the sandstone ledge rock outcropping numerously.

Plat No. 19. One Acre Natural Growth.

Line 1 N. E. 42 5 chains.

Line 2 N. W. 48 2 chains.

Line 3 N. E. 42 5 chains.

Line 4 N. W. 48 2 chains.

Diam., In.	Ches. Oak.	White Oak.	Red Oak.	Black Oak.	Hick- ory.	Pine.	Gum.	Maple.	Chest- nut.	Quaking Aspen.	Total
2	62	8	10	1	44	1	..	4	3	1	134
3	18	2	..	..	7	1	..	..	..	2	30
4	14	3	1	3	5	3	..	..	1	2	32
5	19	2	3	1	8	3	..	..	..	..	36
6	19	1	3	2	4	4	..	..	..	..	33
7	15	..	2	1	2	4	..	..	..	..	24
8	18	..	7	3	2	6	..	..	..	..	36
9	10	1	3	2	1	6	1	..	1	..	25
10	10	..	5	..	1	4	..	..	..	..	20
11	1	..	1	..	1	2	..	..	..	..	5
12	2	..	1	..	..	..	1	..	..	..	4
13 .....	..	..	..	..	1	..	..	..	..	..	1
14	1	..	..	..	1	..	..	..	..	..	2
15 .....	..	..	..	..	..	..	..	..	..	..	..
16 .....	..	..	..	..	..	..	..	..	..	..	..
17 .....	..	..	..	..	2	..	..	..	..	..	2
18 .....	..	..	..	..	..	..	..	..	..	..	..
19 .....	..	..	..	..	..	..	..	..	..	..	..
20 .....	..	..	1	..	..	..	..	..	..	..	1
	189	17	37	13	79	34	2	4	5	5	385

Arbor Day

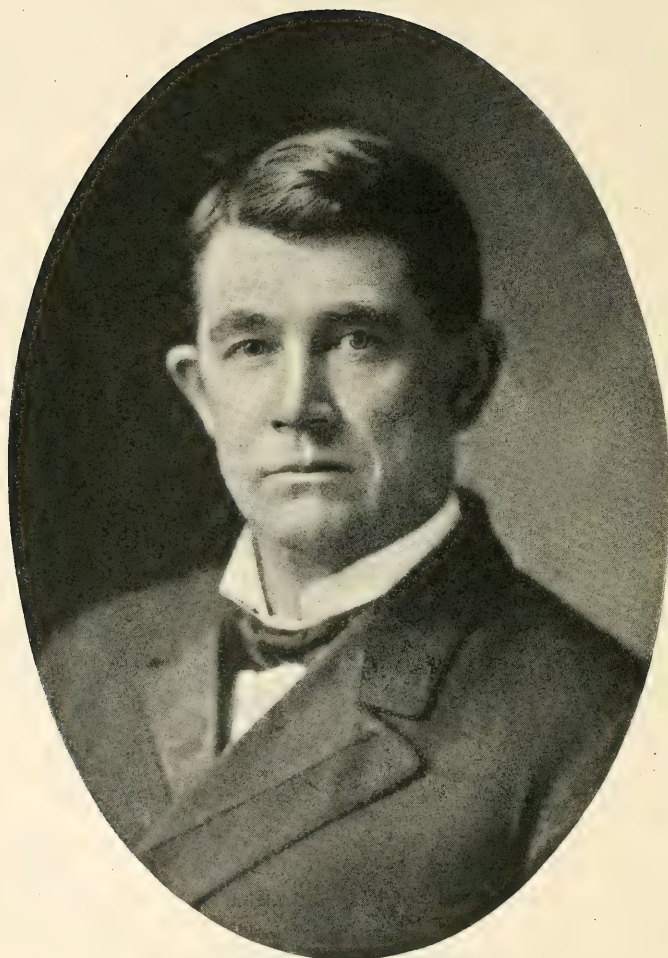
Woodman, Spare That Tree

Woodman, spare that tree,
Touch not a single bough!
In youth it sheltered me,
And I'll protect it now;
'Twas my forefather's hand
That placed it near his cot;
There, woodman, let it stand,
Thy axe shall harm it not.

That old familiar tree,
Whose glory and renown
Are spread o'er land and sea—
And would'st thou hack it down?
Woodman, forbear thy stroke,
Cut not its earth-bound ties.
Oh, spare that aged oak,
Now towering to the skies!

When but an idle boy,
I sought its grateful shade;
In all their gushing joy,
Here, too, my sisters played.
My mother kissed me here;
My father pressed my hand—
Forgive the foolish tear;
But let the old oak stand.

My heart-strings round thee cling,
Close as thy bark, old friend;
Here shall the wild birds sing,
And still thy branches bend.
Old tree! the storm still brave,
And, woodman, leave the spot!
While I've a hand to save,
Thy axe shall harm it not.



GOVERNOR J. FRANK HANLY.

Proclamation by the Governor

UNITED STATES OF AMERICA.

STATE OF INDIANA.
EXECUTIVE DEPARTMENT.

A PROCLAMATION.

The mysteries of the changing seasons are about us. Budding foliage, bursting flowers and fragrant blossoms are everywhere. The air is vibrant with the babble of many waters and with the cries and songs of nestling birds. April—changing, fickle, winsome April—sits again “At the loom of Spring,” weaving of air and sunlight and of dew and shower a thousand “wonder fabrics.” Unseen but vital and mysterious forces are revivifying the earth and calling unto us to join in Nature’s annual triumph over death.

To this call we can make no more appropriate answer than to set apart a day for the celebration of the return of this glad new season, and for the planting of trees and shrubs. Every tree planted makes the earth more habitable and a happier place in which to dwell. It adds, also, to the material welfare of the State.

Therefore, in accordance with precedent and custom, and in keeping with the moving and impelling forces about us, I, J. Frank Hanly, Governor of the State of Indiana, do hereby designate, set apart and proclaim Friday, April 26, and Friday, October 25, 1907, as

ARBOR DAYS

and recommend that each of said days be observed by the people of the Commonwealth as a day of rest and celebration; that the ceremonies incident to the celebration of these days be characterized by the planting of trees and shrubs upon the grounds about public buildings and public institutions, upon the public highways and about private homes; that those in charge of the benevolent institutions of the State give recognition to these days by fitting observance, and that the schools, public and private, observe them, as far as practicable, by public exercises of such a character as will give the children of the State a better understanding and a higher appreciation of tree and bird life.

Let this be done in the interest of forestry cultivation, and with a view to adding to the beauty and the wealth and resources of the State, and to our own culture and happiness and the culture and happiness of our children. To him who understands the life of tree and bird and the lessons taught by them “the whispering grove a holy temple is,” and every bird that has the gift of song, God’s messenger.

Done at the capitol of Indiana, in the city of Indianapolis, this sixteenth day of April, in the year of our Lord, nineteen hundred and seven, in the year of the independence of the United States the 131st and of the State of Indiana the 91st.

By the Governor:

J. FRANK HANLY,
Governor of Indiana.

FRED A. SIMS,
Secretary of State.

[SEAL]

Message to Schools

President Roosevelt addressed "to the school children of the United States" a message on the significance of Arbor Day, which, during the month of April, is celebrated in many of the States. The message was as follows:

"To the School Children of the United States—Arbor day (which means simply 'tree day') is now observed in every State in our Union—and mainly in the schools. At various times from January to December, but chiefly in the month of April, you give a day or part of a day to special exercises, and perhaps to actual treeplanting, in recognition of the importance of trees to us as a nation, and of what they yield in adornment, comfort and useful products to the communities in which you live.

"It is well that you should celebrate your Arbor day thoughtfully, for within your lifetime the Nation's need of trees will become serious. We of an older generation can get along with what we have, though with growing hardships; but in your full manhood and womanhood you will want what nature once so bountifully supplied and man so thoughtlessly destroyed; and because of that want you will reproach us, not for what we have used, but for what we have wasted.

THE ROAD TO SUCCESS.

"For the Nation, as for the man or woman and the boy or girl, the road to success is the right use of what we have and the improvement of present opportunity. If you neglect to prepare yourselves now for the duties and responsibilities which will fall upon you later—if you do not learn the things which you will need to know when your school days are over, you will suffer the consequences. So any nation which in its youth lives only for the day, reaps without sowing and consumes without husbanding must expect the penalty of the prodigal, whose labor could with difficulty find him the bare means of life.

"A people without children would face a hopeless future; a country without trees is almost as hopeless; forests which are so used that they can not renew themselves will soon vanish, and with them all their benefits. A true forest is not merely a storehouse full of wood, but, as it were, a factory of food, and at the same time a reservoir of water. When you help to preserve our forests or to plant new ones you are acting the part of good citizens. The value of forestry deserves, therefore, to be taught in the schools, which aim to make good citizens of you. If your Arbor day exercises help you to realize what benefits each one of you receives from the forests, and how by your assistance these benefits may continue, they will serve a good end.

"THEODORE ROOSEVELT."

The Real Meaning of Arbor Day

Arbor Day, as inaugurated at the instance of J. Sterling Morton by a body of practical Nebraska farmers who sorely felt the need of windbreaks and woodlot products, was essentially a day for forest planting. The resolution adopted provided that April 10, 1872, be "especially set apart and consecrated for tree planting in the State of Nebraska, and the State Board of Agriculture hereby name it Arbor Day and urge upon the people of the State the importance of tree planting." On the first Arbor Day a million trees were planted in Nebraska alone. April 10 of this year is the thirty-fifth anniversary of that day, but the changes during this period have only intensified the need for the work which Arbor Day was designed to encourage—planting forests and managing them sensibly. The growing excess of demand over supply caused a great rise in price of timber, not only in the prairie country, where Arbor Day had its birth, but also in the once heavily timbered regions by which the lumber for the building of the nation was so freely furnished. Even some of the very States in which timber was burned to clear farms can not now furnish sufficient lumber needed for its own needs, nor even the ties for the railroads that cross them.

How important the vast wealth of the forest has been in the development of this country is strikingly shown by a rough estimate of the value of the lumber products of six leading States, even at the low prices that until recently obtained. The figures are averages of the 10-year census returns.

Value of forest products of six leading States, 1850 to 1906:

States.	1870-1880	1880-1890	1890-1900	1900-1906	Total.
Michigan.....	\$18,838,665	\$196,249,000	\$421,981,620	\$677,859,480	
Wisconsin.....	29,174,730	98,735,745	165,415,330	394,593,955	
Pennsylvania.....	93,615,590	199,665,225	256,981,720	257,726,645	
New York.....	118,621,770	159,179,115	177,975,690	191,995,875	
Minnesota.....	6,577,015	27,783,825	58,326,000	162,205,850	
Maine.....	65,201,665	92,817,535	96,648,075	98,917,610	
States.	1890-1900	1900-1906	Total.		
Michigan.....	\$687,062,445	\$284,579,565	\$2,316,570,775		
Wisconsin.....	593,006,300	306,091,746	1,587,017,806		
Pennsylvania.....	524,189,675	202,177,065	1,334,355,920		
New York.....	164,637,620	87,202,170	899,610,240		
Minnesota.....	343,301,465	230,305,410	828,499,565		
Maine.....	126,695,275	94,281,252	574,561,412		

And no stronger argument for the protective value of forests is needed than the recent floods in the Ohio Valley, which brought loss of life and of property valued at millions, because mountains and hills had been bared of forest by excessive cutting, followed by fires.

The forest problem, then, is one that affects not only the nation, but the State, the community, and the individual. And on Arbor Day and in the Arbor Day season great profit may be had, both through planting trees for use or beauty and through seeking to gain a closer touch with the forest. The lifelong study and experience of trained men have made it possible for us to learn about the characteristics of trees and to manage forests accordingly; have shown us how different trees make different demands upon light, soil, and moisture; how trees growing in the forest help and hinder each other; what woods are the most useful, and the extent to which new uses may be found for trees hitherto undervalued.

Since the great resources of nature are entrusted to our keeping like the talents of the parable, and we must render an account of them to posterity, men are in duty bound to husband and improve them as well as to enjoy them. Again, in the present age of endless activity there is felt increasingly the need of proper rest and refreshment, for recreation in the true sense of renewing our powers, and this is one of the great uses of the forest—to supply health and vigor for those who are in need of going back to nature. The preservation of the forest thus becomes a matter affecting character and happiness in many ways, not only in the present generation, but even more so in the generation to come. This thought is full of suggestion for the churches, many of which are already taking up the subject either through the pulpit or through the men's clubs which are now so important a part of their social life.

Many of the States issue Arbor Day annuals, some of which, in their descriptions and illustrations of native trees and in the information they furnish concerning their planting, protection and use, form valuable contributions to forestry. An Arbor Day annual which especially carried out the intent of the authors of Arbor Day, was issued in 1902 by Arthur LeFevre, then State Superintendent of Public Instruction in Texas. This took account of the forest resources of Texas, and of the organizations for forest work in the states, in the nation, and in foreign nations; and discussed the practical value of woodlots and of forests as a protection to many industries.

In Hawaii Arbor Day was first observed on November 3, 1905,

when the Governor generously contributed half of a fund for a prize of \$5 for each of the 154 public schools, to be given to the grade whose planting on Arbor Day secured most successful results. The other half of the fund was raised by subscription. Most of the trees were furnished by the State nursery at Honolulu. The Pennsylvania Forestry Association also offered prizes last spring—four of \$15 and four of \$10—for the best examples of commercial, park, and roadside planting, judged on the date of the autumn Arbor Day. This plan should have a twofold value; first, in stimulating forest planting, and second, in giving publicity to plantations which exhibited exceptional judgment, good taste and energy.

Arbor Day is pre-eminently a school celebration. Very much has been done in beautifying school grounds through observance of the day, and very much more will be accomplished as the educational features of the occasion develop broadly. The possibilities of Arbor Day celebration in the public schools seem almost infinite, when careful consideration is given the work of one county—Winnebago County, Illinois. There the heartiest encouragement of Arbor Day principles is given in the county institute and in personal visits to the schools, the county superintendent, Mr. O. J. Kern, having fully grasped the broader significance of Arbor Day work. An annual is published, illustrated with photographs of school grounds and of lawns adorned by rows and clumps of planted trees, giving planting suggestive plans, with diagrams. Workshops are shown, of the larger schools, where in practical manual training boys are constructing guards for the young trees to be planted on Arbor Day. Best of all, near-by views are given of the true forest where possible, of which the Forester, Mr. Pinchot, has said, "Perhaps no other natural agent has done so much for the human race, and has been so recklessly used and so little understood."

Arbor Day Tree Planting

Tree planting on Arbor Day by the schools is usually accompanied by literary exercises consisting of essays, songs, recitations and addresses. In most cases the literary program forms the absorbing feature of a day intended for another purpose. I am not attempting to discourage the literary exercises in connection with the tree planting program, as it is a means of stimulating interest and bringing together the community and causing a revival of interest in both school and trees, but I suggest that much more attention be given to the matter of arboreculture features. The selection, the method of planting, the time when to do it and the care devoted to the trees after the Arbor Day program has been rendered, are the vital elements which bring results from the exercises, and if these matters are not given emphasis the day's program falls far short of the purpose.

The selection of the trees for Arbor Day planting should be attended to with care, and only such ones chosen and planted as are hardy to the conditions at hand. The school ground should not be made a place of experiment, and, naturally, trees on public grounds are exposed to injury more than on private grounds. Any trees which can not endure moderate abuse should not be chosen, as under the best restrictions the soil will be trampled, twigs broken and other numerous common injuries imposed. The soil of the school grounds or other grounds intended for planting should be studied, because differences in soil make necessary differences of tree selection and all the attendant features of propagation. Because a tree is known to grow in the locality does not imply that it will grow on any spot in the community. Sandy soils and clay soils are found in alternate relation in almost any part of the State, in both strata and territorial connections, and a tree which thrives in one soil may have a struggle to exist in the other. When a study of the soils has been made to determine the differences in kind and porousness and then adaptable trees selected, rightly planted and properly cared for, after success is almost assured.

There are also other questions which should be considered before the selection of trees is made, and they are the permanent de-

votion of the ground to the purpose for which tree planting is done, the immediate needs and the space allotted to a tree. If the grounds under consideration are to be devoted permanently, so far as can be foretold, to the use for which it is set apart and the present needs of tree decoration are not urgent, then the long-lived trees should be chosen and such as will correspond with the other conditions of soil and moisture. If the area is not likely to be permanently devoted to the present uses and the decoration is to fill a limited time and necessary want, then the short-lived, fast growing trees should be selected. In places where the conditions are permanent and the needs immediate, a compromise can be made by planting the different lived trees in alternate harmony. They may be planted closely and at a proper development in growth the short-lived trees can be cut out and the permanent trees left at proper distances.

In places where the space will not permit large spreading topped trees the selection should be of trees, the tops of which are more dense and compact. The following lists will give information concerning selections. The long-lived trees best suited for decorative plantings on permanent grounds are the American elm, American ash, sugar maple, Norway maple, tulip poplar, linden or basswood, American chestnut, sweet gum, sycamore, scarlet oak, red oak, white oak, yellow locust and some of the evergreens. Those best suited for limited time are red maple, ginkgo, pin oak, horse chestnut, hackberry, catalpa, Lombardy poplar, some of the evergreens and a few foreign varieties. Where the space is limited but permanent the trees best suited and which adapt themselves to the conditions are the sugar maple, Norway maple, linden, chestnut, sweet gum, American ash, scarlet and red oak and tulip poplar. The trees which should not be planted any place for decoration are the Carolina poplar, silver maple and other similar kinds.

The time and method of planting should be given the closest attention. The time is subject to difference of opinion, but such is mostly due to the object in mind. If an agent or individual cares only to dispose of his trees he may argue that any time is good for planting, but a scrupulously honest individual will not disregard the proper time to plant. In Indiana fall planting may sometimes be done to advantage, but it can not be held as a rule to practice. In all ordinary conditions early spring planting is more successful, especially for deciduous trees. The best time is immediately after the freezing is over and the soil is dry enough. The reasons given against fall planting are that the trees do not get a

sufficiently established root system to sustain them against the hard freezings and thawings of the winter. If it is possible the planting should be done on a cloudy, cool day, and unless the atmosphere is very moist, the trees should be kept moist by having their roots submerged in water or a thin mixture of earth and water and only removed as they are planted. A very few minutes' exposure to the air will injure the small fibrous roots which are the feeders of the tree.

The holes for the tree should be dug a few days before the time of planting. They must be large enough so that the roots can be placed in their natural positions without cramping. It is well to have a foot or more additional space on all sides of such ample depth that plenty of loose soil can be placed under the roots. In digging the holes place the top soil by itself and if the lower soil is poor and lumpy, it should be substituted by richer finely pulverized earth for the planting. Use no manure unless it is thoroughly mixed with earth, and such should not be placed around the roots, as manure will burn and rot them. Good, clear, rich, heavy, finely pulverized soil is at all times better for tree planting. By digging the holes a few days beforehand the soil requisites can be arranged and the proper moisture conditions secured. If the earth is too wet it will afford time for proper drying out, and if too dry it will afford time to fill the holes with water and saturate till the result is satisfactory for good planting. A good drainage is essential, as but few trees will live in a place where water settles around the roots and is retained by a heavy clay.

The tree should be set at a depth of an inch deeper than it originally grew, and should be set firmly and fastened by strings tied to stakes to prevent the winds swaying and loosening it in the ground. Be careful in doing this not to injure the bark. After planting, the ground should be mulched around with rotten substance either of straw, tanbark or sawdust. This device will not only retain the moisture, but will keep down the weeds and fertilize the soil. With this treatment watering will not be necessary except in excessive drought, in which case several gallons of water should be poured around the roots of the tree every few days until the danger is passed.

Many of the reasons for the failure of the tree to live and grow after it has been planted can be ascribed to the injuries sustained in digging it up. The roots are torn, strained or mutilated or such scanty root system is taken up that the tree has no means of keeping up life. In digging up the tree the roots should be pre-

served as entire as possible and entirely practical. If the tree is of a dimension of an inch or two in diameter and of four or five years' growth, the root system should be preserved for at least three feet around the stem. Extreme caution should be exercised in retaining the small feeders. If a large tree is taken up a ball of earth of the dimensions above should be kept compactly intact with it and planted. Having carefully dug up the trees, the roots should be examined and cut away smoothly and completely all bruised and broken roots. By so doing decay will not occur and fibrous roots will form quickly around all such places. Top roots may be cut down to easy requirements for planting in the cavities. The tops of the trees should always be pruned back to harmonize with the diminished root system caused by digging. A good suggestion is the cutting of the branches back from one-third to one-half, but at no instance should they be cut to bare poles. In cutting the top back the branches should always be cut near a bud, as the pruned member will always die back to the nearest bud. This will avoid the dead stubs so frequently seen on pruned trees a year or so after.

When trees are selected from the forest, they should be secured from regions open to the sun rather than from a densely shaded area, as trees from the latter places are tender and weak and will not survive the sun and open exposure. All newly planted trees should be protected on the extreme side to the sun exposure by boards or tree boxes. They should also be protected from stock and other dangers by tree boxes.

SEEDLING TRANSPLANTING.

The preparation of the soil for planting seedlings is the same in all instances as has been given for seed planting. The making of excavations to receive the trees is the thing most difficult, to not impede rapid progress. If the trees are large and have spreading roots, the places must be made large enough to receive the roots without cramping them. It is better, therefore, to transplant the seedlings at an early age, in order to lessen the work as well as to insure better results of growing. Most seedlings at the ages of one and two years do not possess much root system, simply a straight stem with small hair fibres. If the ground is well prepared the planter can make the holes with a sharpened handspike by jabbing it into the loose soil and prying in all directions. If it cannot be performed in this manner a circular spade, dibble or other implement adaptable to make the small holes necessary can be used. If the former plan is followed the planter can quickly make the holes,

insert the slender root and firmly press the dirt around it. In all instances the dirt should be pressed thoroughly around the roots, so that no air remains around them. To this cause may be attributed the death of many trees planted. In some instances a spade was inserted into the soil and the earth pried apart, the tree root inserted, the spade removed and the earth stamped firmly upon the roots. For planting the small seedlings various methods may be employed to make the excavations successfully.

If larger trees are planted, more work and effort will be required to make the holes and to plant the tree properly.

The digging of the seedlings should be performed in a way not to injure them. In a small nursery, and when the trees are young, a sharp spade can be used by cutting along both sides of the rows and then lifting the trees out carefully. At all times mangling the trees should be avoided. It is not essential to prune unless the trees should become broken, when they should be pruned smoothly.

The trees may be dug in the fall and heeled over winter for early planting in the spring. Young trees in this climate should not be planted in the fall. The winters are too severe on them in their newly planted condition. The same thing is also true, in my judgment, for larger trees.

The trees can be heeled in the cellar by keeping moistened dirt over the roots. The usual method of heeling trees is to dig a trench deep enough to bury the roots and the greater part of the bodies of the trees. Extend the trench east and west, the south bank sloping at an angle of about thirty degrees. Place the trees in the trench in single layers with the tops to the south and cover each layer with fresh earth. It is advisable to leave only the branches exposed. They may be left in the trench till they are taken out for planting. Select the site for the trench where the drainage is good.

When removed for planting, the roots should be plunged into a vessel containing a mixture of clay and water formed into a slush. The same thing should be done to the seedlings when taken from the nursery, unless they are immediately planted or heeled in. The roots of any tree which it is intended to transplant should never be allowed to become dry.

The distances at which trees should be planted are 4, 5 and 6 feet apart for regular forest plantings, and should be in rows both ways to admit of cross-cultivation. They should be plowed or cultivated in some manner to keep down the weeds till they are large enough to survive by themselves.

The close planting enables them to soon shade the ground and

thus conserve the moisture to them. Besides, it aids in natural trimming and long, straight trunk formation. Successive trimmings will be necessary when they begin to crowd and smother out.

The principle of tree growth is that if the tree is grown in the open it branches and forms a shade tree. The growth goes to limbs and branches instead of body formation. If it is crowded, it goes up in search of light, does not branch, and consequently a good trunk is formed to make the tree valuable.

MISCELLANEOUS BULLETINS AND CIRCULARS

BY

United States Department of Agriculture,
FOREST SERVICE.

GIFFORD PINCHOT, Forester, AND ASSISTANTS

1907

These bulletins and circulars are selected because of the practical forestry suggestions they contain for work in Indiana, and for the industrial discussion showing the foundation principles of the forestry movement and the economic features embodied as well. Their careful study is requested because of their application to local forestry work.

W. H. FREEMAN.

General Work Against Insects Which Defoliate Shade Trees in Cities and Towns*

The question of proper work against the insects which affect shade trees in cities and towns naturally divides itself under two heads: (1) What can be efficiently and economically done by city governments? (2) If city or town administrators will not appropriate a small amount of money to carry on work of this kind, what can citizens who are interested in the question of shade trees do?

INTELLIGENT SUPERVISION DESIRABLE.

The planting of shade trees seems to be considered a legitimate function of the board of public works in every municipality. It is sometimes done by a specially appointed officer, under the control of the superintendent of streets and sewers; or it is sometimes placed in charge of a subcommittee of the board; or a special commission of outsiders is appointed to superintend the work. Admitting that the planting of shade trees is a public matter, their care should also be a public duty. Yet in not one of the larger or smaller cities of the Eastern United States with which the writer is familiar is any proper amount of work done by the public authorities against shade-tree insects. New York is the only city in the country where a man of entomological knowledge is employed to direct operations against shade-tree insects, either in the streets or the public parks. That New York's investment is a good one no one who knows the work of Mr. E. B. Southwick can doubt. By this remark the writer does not wish to be understood as advocating the appointment of a paid entomologist under every city government, although where the parks are large in cities situated within the region of greatest shade-tree insect activity, such a course would always be desirable. With an intelligent and industrious superintendent of parks, or a city forester, or whatever he may be termed, and the wise expenditure of a comparatively small amount of money each year, the shade trees of any city could be kept green throughout the summer. The amount of money to be

*In advance, from an article entitled "The Shade-tree Insect Problem in the Eastern United States," to be published in the Yearbook of the Department for 1895.

expended in this direction would naturally vary with the number of trees to be attended to, as well as with the variety and the size of the trees and the geographical location of the city. Even in Brooklyn, however (and this seems to the casual observer to be the most unfortunate of all our Eastern cities from this standpoint), it is within bounds to estimate that the expenditure of \$3,000 to \$4,000 a year would result in green shade trees the summer through. This amount, however, will in all probability not need to be an annual appropriation. The first cost of a proper spraying apparatus will have to be added, but the apparatus once purchased and thorough work performed for two or three years, consecutively, the probabilities are strong that the number of shade-tree insects will be reduced to such an extent that a much smaller annual expenditure will be sufficient.

KIND OF APPARATUS TO USE.

The question of a proper spraying apparatus is a rather serious one, since in this direction a considerable amount of money should be expended. A steam apparatus will do the work with much greater rapidity than a hand pump, and yet with a strong double-acting force pump, which can be operated by one man, and a tank of 100 gallons capacity mounted on a strong cart, many large trees can be well sprayed in the course of a day. From such a pump two lines of hose may be run with advantage. The working force of such an apparatus should be, a horse to draw the cart, a man to drive and do the pumping, and one man to each of the lines of hose. Several such machines have been used with good results in the work of the Gypsy Moth Commission, both for street trees and in the public parks. A steam apparatus, however, of such a capacity that a pressure of 75 pounds per square inch may be gained, will enable the operation of four or five lines of hose simultaneously. The rapidity of work will therefore be doubled, and certainly by the use of two such pumps the shade trees of any ordinary city can be gone over with sufficient rapidity to destroy all insects within the required time. A boiler mounted on a truck, the boiler to be complete with all fixtures—smokestack, bonnet, firing tools, and springs to the truck—and a pump having a capacity of 10 to 20 gallons a minute, connected up to the boiler ready for operation, can be purchased for a sum well within \$500. This truck should be mounted on wheels with broad tires. Connecting this apparatus with a proper tank cart would be an additional expense not to exceed \$100 for a tank of a capacity of 200 gallons. Such an ap-

paratus furnished with hose and smooth-bore nozzles of about one-sixteenth inch in diameter, when discharging, under 40 pounds pressure, from each of several such nozzles, would spray about half a gallon of insecticide mixture per nozzle per minute.

A strong steam pump to be used in connection with a small oil-burning boiler, the whole apparatus on a smaller scale than that described above, has been estimated at \$275 by a prominent New York firm, delivered on board the cars.

There is no reason why an old steam fire engine could not be readily arranged for this shade-tree spraying work. In one or two instances a steam fire engine has been used for this purpose without modification, the object being simply to knock the insects from the trees by means of a strong stream of water. By such means as this Col. John M. Wilson, U. S. A., now Superintendent of Public Buildings and Grounds in Washington, kept the elms green at West Point several years ago, when he was superintendent of the Military Academy. In every large city where the fire department is necessarily kept in the best condition, an engine is occasionally retired. The transfer of such a retired engine to the street department could no doubt be readily made, and a little work by a competent steam fitter would transform it into a most admirable insecticide machine. In this way the initial expenditure for machinery would be avoided.

WHEN THE WORK SHOULD BE DONE.

When the spraying apparatus has been once provided, the funds necessary for the purchase of insecticides and the necessary labor must be available at the proper time. If the work is not done promptly and at just the right time, more or less damage will result, and a greater expenditure will be necessary. During the latter part of May and the first of June, in the case of nearly all prominent leaf-eating shade-tree insects, one or two thorough sprayings must be made. In fact a second spraying, begun immediately after the completion of the first one, will be in ordinary cases as much as need be expected. In addition to this spraying work, a force of men must be employed for a time in July to destroy the elm leaf-beetle larvæ as they are descending to the ground and to burn the webs of the first generation of the fall webworm. This will finish the summer work. The winter work will consist of the destruction of the eggs of the white-marked tussock moth, the cocoons of the fall webworm, and the bags of the bagworm. The number of men to be employed, and the time occupied, will depend

upon the exigencies of the case. Upon the thoroughness of this work will depend, to a large extent, the necessity for a greater or less amount of the summer work just described.

We have now to consider what can be done by citizens where city governments will not interest themselves in the matter. It is unreasonable to expect that a private individual will invest in a spraying apparatus and spray the large shade trees in front of his grounds, therefore in spraying operations where large trees exist in numbers there must be combination of resources. This affords an opportunity for the newly invented business of spraying at so much per tree. In Bridgeport, Conn., Mr. W. S. Bullard, who was formerly and is yet for the greater part of the year a roofer and paver, has constructed several cart sprayers, and during the months of June and July (at a time, by the way, when the men in his employ are apt to be out of work) he sprays trees on the grounds of private individuals and along the street in front of their grounds, under contract, at so much per tree, guaranteeing to keep the trees in fair condition during the season. His work has been directed solely against the elm leaf-beetle, since that is the only insect of great importance in Bridgeport. In the month of July last the writer, in driving through the streets of Bridgeport, found it easy to pick out the trees which had been placed in Mr. Bullard's care. Such elms were green, while all others were brown and nearly leafless. The defect of this plan as a general practice lies in the fact that not all property owners or residents can afford to employ a tree sprayer, while others are unwilling, since they deem it the business of the city authorities or do not appreciate the value of tree shade.

CO-OPERATIVE EFFORT.

Any effort, therefore, looking toward the arousing of popular sentiment or the banding together of the citizens in the interest of good shade is desirable. A most excellent plan was urged by one of the Washington newspapers the past summer. It advocated a tree protection league and each issue of the paper through the summer months contained a coupon which recited briefly the desirability of protecting shade trees against the ravages of insects, and enrolled the signer as a member of the league pledging him to do his best to destroy the injurious insects upon the city shade trees immediately adjoining his residence. This was only one of several ways which might be devised to arouse general interest. The average city householder seldom has more than half a dozen street

shade trees in front of his grounds, and it would be a matter of comparatively little expense and trouble for any family to keep these trees in fair condition. It needs only a little intelligent work at the proper time. It means the burning of the webs of the fall webworm in May and June; it means the destruction of the larvæ of the elm leaf-beetle about the bases of the elm trees in late June and July; it means the picking off and destruction of the eggs of the tussock moth and the bags of the bagworm in winter, and equally simple operations for other insects, should they become especially injurious. What a man will do for the shade and ornamental trees in his own garden he should be willing to do for the shade trees 10 feet in front of his fence.

L. O. HOWARD,
Entomologist.

Approved: CHAS. W. DABNEY, JR.,
Assistant Secretary.

Washington, D. C., March 6, 1896.

The Timber Supply of the United States

BY R. S. KELLOGG,
Forest Inspector.

FOREST PRODUCTS.

The lavish manner in which the United States has consumed the products of its forests and the rapidity with which our timber supply is melting away are wholly unappreciated by those who have never given the matter more than passing consideration. Familiar as all are with the use of wood for every purpose and in every industry, it is only when the various items are added that there begins to come a realization of the indispensable place the forests fill in the national economy. A conservative statement of the present yearly output of the forests is shown below, the values given being those at the point of production:

TABLE 1.—*Annual output of forest products.*

	Quantity.	Value.
Lumber.....board feet.....	35,000,000,000	\$560,000,000
Firewood.....cords.....	100,000,000	350,000,000
Shingles and lath.....		30,000,000
Hewed cross ties.....	70,000,000	30,000,000
Cooperage stock.....		25,000,000
Turpentine and rosin.....		25,000,000
Pulp wood.....cords.....	3,000,000	15,000,000
Timber exported (unsawed).....		10,000,000
Mine timber, posts, poles, and other products.....		30,000,000
Total.....		\$1,075,000,000

The total quantity of wood cut to obtain the products listed in the table was not less than 20 billion cubic feet.

Rapidly as the population of the United States has increased, the lumber consumption has increased still more rapidly. In round numbers, and allowing for incomplete reports, the lumber cut in 1880 was 18 billion feet; in 1890, 24 billion feet, and in 1900, 35 billion feet. The increase in population from 1880 to 1900 was 52 per cent., but in lumber cut 94 per cent. The United States is now using annually 400 board feet of lumber per capita, while the average for Europe is but 60 feet per capita.

Table 2 affords a better understanding of the vast amount of

lumber used. This gives the lumber cut of the principal States since 1880. The figures for 1880, 1890, 1900, and 1905 are those compiled by the census; the total cut is estimated by assuming an average cut between census dates. This brings the total cut since 1880 to more than 700 billion feet—a truly astonishing figure when we stop to consider it. This quantity of lumber would make a floor 1 inch thick over Vermont, Massachusetts, Connecticut, Rhode Island, and Delaware, or an area of 25,000 square miles.

TABLE 2.—*Lumber cut of the United States, 1880–1906.*

State.	Reported by census of—				Estimated total cut, 1880–1906.	Per cent.
	1880.	1890.	1900.	1905.		
	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>	
Alabama.....	251,851	586,143	1,096,539	1,243,988	19,625,000	2.8
Arkansas.....	172,503	526,091	1,595,933	1,680,536	23,932,000	3.4
California.....	304,795	515,823	734,232	1,077,499	15,789,000	2.2
Colorado.....	63,792	79,906	133,746	141,914	2,614,000	.4
Connecticut.....	64,427	48,277	107,594	69,376	1,874,000	.3
Florida.....	247,627	411,436	788,905	812,693	14,802,000	2.0
Georgia.....	451,788	572,970	1,308,616	1,135,910	21,865,000	3.1
Idaho.....	18,204	27,800	65,331	211,447	1,526,000	.2
Illinois.....	334,244	218,938	381,584	211,545	7,548,000	1.1
Indiana.....	915,943	707,115	977,878	563,853	21,165,000	3.0
Iowa.....	412,578	568,816	351,769	281,521	11,410,000	1.6
Kentucky.....	305,684	420,820	765,343	586,371	13,618,000	1.9
Louisiana.....	133,472	303,591	1,113,423	2,459,327	19,989,000	2.8
Maine.....	566,656	564,243	756,515	863,860	17,119,000	2.4
Maryland.....	123,336	81,078	183,393	166,469	3,394,000	.5
Massachusetts.....	205,244	208,655	342,058	262,467	6,637,000	.9
Michigan.....	4,172,572	4,245,717	3,012,057	2,006,670	93,436,000	13.2
Minnesota.....	563,974	1,079,403	2,341,619	1,942,248	38,174,000	5.4
Mississippi.....	168,747	452,797	1,202,334	1,727,391	20,173,000	2.9
Missouri.....	399,744	395,755	715,968	553,940	13,346,000	1.9
Montana.....	21,420	89,511	255,685	236,430	3,757,000	.5
New Hampshire.....	292,267	266,890	562,258	491,591	10,103,000	1.4
New Jersey.....	109,679	32,285	72,660	44,058	1,585,000	.2
New York.....	1,184,220	909,990	874,754	581,976	23,765,000	3.4
North Carolina.....	241,822	509,436	1,278,399	1,318,411	20,486,000	2.9
Ohio.....	910,832	541,076	957,239	420,905	18,886,000	2.7
Oregon.....	177,171	444,565	734,181	987,107	14,166,000	2.0
Pennsylvania.....	1,733,844	2,113,267	2,321,284	1,738,972	53,589,000	7.6
South Carolina.....	185,772	197,940	466,109	609,769	8,466,000	1.2
Tennessee.....	302,673	450,097	939,463	775,885	15,858,000	2.3
Texas.....	328,968	839,724	1,230,904	1,406,473	24,109,000	3.4
Vermont.....	322,942	370,155	365,869	337,238	9,255,000	1.3
Virginia.....	315,939	409,804	956,169	949,797	16,176,000	2.3
Washington.....	160,176	1,061,560	1,428,205	2,485,628	30,299,000	4.3
West Virginia.....	180,112	299,709	773,583	855,889	12,654,000	1.8
Wisconsin.....	1,542,021	2,817,200	3,361,943	2,623,157	70,647,000	10.0
All others.....	200,317	126,270	226,977	264,854	4,875,000	.7
Total.....	18,087,356	23,494,853	34,780,513	34,127,165	706,712,000	100.0

There are some striking things shown in this table. Since 1880 Michigan has produced over 93 billion feet of lumber, or 13.2 per cent. of the output of the entire United States; Wisconsin, 70 billion feet, or 10 per cent. of the total; Pennsylvania, 53 billion, or 7.6 per cent., and Minnesota, 38 billion, or 5.4 per cent. The combined output of these four States since 1880 is almost 256 billion feet, or 36 per cent. of the total production of the United States.

No less striking than the increase in output has been the shifting of the sources of supply, as one region has been cut out and another invaded. The percentage of the total lumber cut furnished by the principal regions since 1850, according to census figures, is as follows:

TABLE 3.—*Geographical distribution of total lumber product.*

Year.	North-eastern States.	Lake States.	Southern States.	Pacific States.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
1850.....	54.5	6.4	13.8	3.9
1860.....	36.2	13.6	16.5	6.2
1870.....	36.8	24.4	9.4	3.8
1880.....	24.8	33.4	11.9	3.5
1890.....	18.4	36.3	15.9	7.3
1900.....	16.0	27.4	25.2	9.6

The Northeastern States reached their relative maximum in 1870 and the Lake States in 1890. The Southern States are undoubtedly near their maximum today, with about 35 per cent. of the total lumber product, and the time of ascendancy of the Pacific States is rapidly approaching. Since the census of 1900 the product of the Pacific States has risen from less than 10 per cent. of the lumber output of the country to 20 per cent. There will be no more shifting after the Pacific States take first place, since there is no new region of virgin timber to turn to.

The shifting of the chief sources of supply has, of course, been accompanied by a change in the kinds of lumber produced. There was a time when white pine alone constituted one-half of the total quantity. In 1900 this species furnished but 21.5 per cent., and in 1904 only 15 per cent. of the lumber cut. On the other hand, Douglas fir is credited with 5 per cent. in 1900 and 13 per cent. in 1905.

FOREST RESOURCES.

The great demand made upon the forests naturally leads to the question: How much timber is now standing in the United States and how long will it last at the present rate of cutting?

The general distribution and character of the original forests of the United States are shown by fig. 1. A glance at this discloses that five groups of States embrace the naturally timbered areas of the country—the Northeastern States, the Southern States, the Lake States, the Rocky Mountain States, and the Pacific States. Of these, the two groups last mentioned are occupied by forests in which practically all the timber-producing trees are coniferous,

the first three by both conifers and hardwoods. The earliest attack was upon the white pine of the Northeast, the original stand of which is almost entirely cut out. The present stand in the Northeastern States is mainly spruce, second-growth white pine, hemlock and hardwoods.

The Southern States produce essentially four types of forest, which may broadly be said to divide the land among them according to elevation above sea level. The swamp forests of the Atlantic and Gulf coasts and the bottom lands of the rivers furnish cypress and hardwoods. The remainder of the coastal plain from Virginia to Texas was originally covered with "southern" or "yellow" pine—the trade name under which the lumber of several pines is now marketed. The plateau which encircles the Appalachian range and the lower parts of the mountain region itself support a pure hardwood forest, while the higher ridges are occupied by conifers—mainly spruce, white pine, and hemlock.

The Lake States still contain much hardwood forest in their southern portions. In the north the coniferous forest includes, besides the rapidly dwindling pine, considerable tamarack, cedar, and hemlock.

The chief timber trees of the Rocky Mountain forest are western yellow and lodgepole pine, while the Pacific forest is rich in the possession of half a dozen leading species—Douglas fir, western hemlock, sugar and western yellow pine, redwood, and cedar.

When an attempt is made to estimate the amount of timber of these various species and regions, the deficiency of our knowledge becomes plain. Various estimates of the stumpage have been made, it is true, but it must be said at the outset that no authoritative estimate can be made at the present time, since the magnitude of the task and the many difficulties involved have hitherto prevented the gathering of the necessary data. Nevertheless, certain general conclusions can be established. In the interest both of the lumber trade and of the public an exact knowledge of the situation which confronts the country is called for, since the lack of such knowledge creates uncertain business conditions and prevents the framing of a rational and comprehensive plan for the best use of our forest resources.

The principal estimates of the stumpage of the United States which have been made since 1880 are given in Table 4. The first is that presented by Sargent in Volume IX of the Tenth Census. This estimate, in addition to being too low for almost every species considered, with the possible exception of the hardwoods, is notable

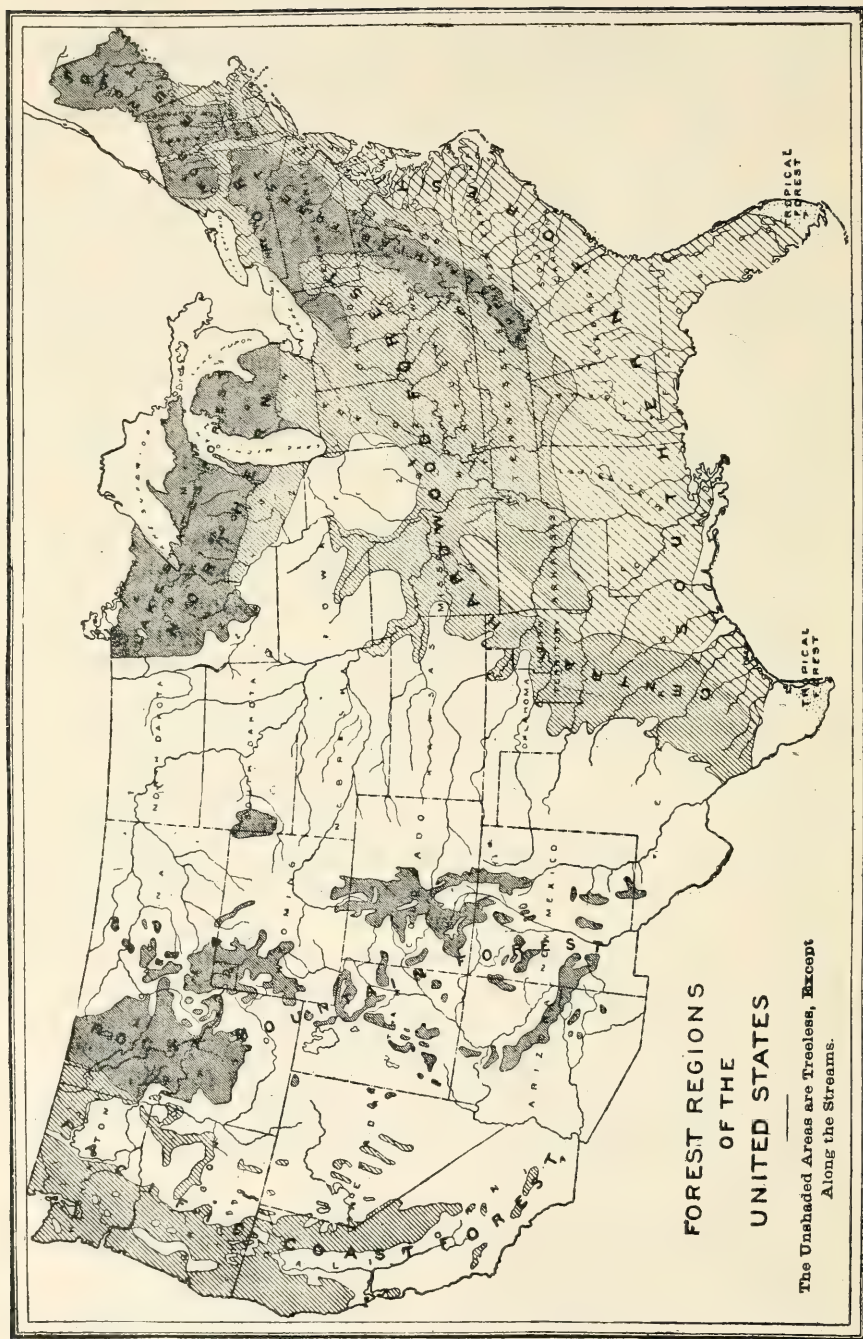


Fig. 1.—Map showing forest regions of the United States.

for its omission of the timber which exists today in greater quantity than any other—Douglas fir—and also for the omission of western yellow pine, another important species. The next estimate is that of Hotchkiss, published in his “Lumber and Forest History of the Northwest” in 1898. He does not go into details, but simply estimates that the total stumpage is 1,400 billion feet, of which the Northern States have 100 billion, the Southern States 300 billion, and the Pacific States 1,000 billion feet. Next are the estimates prepared by Gannett and published by the Twelfth Census in Bulletin 203. These are the most carefully prepared estimates yet made and have been widely quoted. In addition to bringing the figures for several species up more nearly to the probable stand, these estimates also cover Douglas fir, western yellow pine, and sugar pine, which were omitted in the census of 1880. The next estimate is the one made by Fernow in 1902 and published in his “Economics of Forestry.” Like that of Hotchkiss, this is also a regional estimate, the stumpage of the Northern States being placed at 500 billion feet, that of the Southern States at 700 billion, and that of the Western States at 800 billion, a total of 2,000 billion feet and the highest of any given in the table. It may be noted in passing that in a previous estimate published in 1896, in Circular No. 11 of the Division of Forestry, Fernow placed the total stumpage of the country at 2,300 billion feet, which, upon further consideration,

TABLE 4.—*Estimate of stumpage of the United States.*

Kind of timber.	Census, 1880.	Hotchkiss, 1898.	Census, 1906.	Fernow, 1902.	Long, 1903.	American Lumber- man, 1905.
	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>
White pine.....	87,755,000	.....	50,000,000	.....	60,000,000	.....
Eastern and northern pine.....	.....	.....	.....	.....	.....	55,000,000
Southern yellow pine.....	237,141,500	.....	300,000,000	.....	187,250,000	300,000,000
Eastern spruce.....	12,265,000	.....	50,000,000	.....	18,221,000	75,000,000
Eastern hemlock.....	20,165,000	.....	100,000,000	.....	56,571,000	100,000,000
Douglas fir.....	.....	.....	300,000,000	.....	260,000,000	350,000,000
Western yellow pine.....	.....	.....	125,000,000	.....	138,000,000	250,000,000
Cypress.....	22,153,600	.....	65,000,000	.....	.....	65,000,000
Redwood.....	25,825,000	.....	75,000,000	.....	75,000,000	75,000,000
Cedar.....	22,800,000	.....	.....	.....	27,640,000	.....
Sugar pine.....	.....	.....	25,000,000	.....	.....	50,000,000
Other conifers.....	12,500,000	.....	.....	.....	.....	250,000,000
Total conifers.....	420,605,100	.....	1,090,000,000	.....	822,682,000	1,570,000,000
Total hardw'ods.....	435,685,000	.....	300,000,000	.....	.....	400,000,000
Region:						
North'n States.....	.....	100,000,000	.....	500,000,000	.....	.....
South'n States.....	.....	300,000,000	.....	700,000,000	.....	.....
West'n States.....	.....	.....	.....	800,000,000	.....	.....
Pacific States.....	.....	1,000,000,000	.....	.....	.....	.....
Total.....	856,290,100	1,400,000,000	1,390,000,000	2,000,000,000	822,682,000	1,970,000,000

^aFlorida and Alabama only.

he evidently considered too high. At the thirteenth annual meeting of the Southern Lumber Manufacturers' Association, in New Orleans, January, 1903, R. A. Long read a paper upon "Stumpage," in which the figures given in the fifth column of Table 4 were presented. Long's estimate does not cover cypress, sugar pine, or hardwoods. Its principal point of interest is that it differs so radically—about 38 per cent.—from that of the census of 1900 upon the stumpage of southern yellow pine. The last estimate given in the table is that published in the *American Lumberman* September 23, 1905. It is based primarily upon census data, with the addition of some species and with increased figures for others.

The totals given by the *American Lumberman* and Fernow are nearly identical; those of Hotchkiss and the census of 1900 differ by 10 million only, and the totals of Long and the census of 1880 would be close together were the omissions in each supplied. It should be remembered, however, in comparing the estimates of 1880 with recent ones that the total cut since 1880 has been over 700 billion feet, of which at least 500 billion feet have been conifers, or 80 billion feet more than the total coniferous stumpage covered by the census of 1880.

The *Pacific Lumber Trade Journal*, in the issue of January, 1907, gave the following estimate of the stumpage of the Pacific coast, including Idaho, Montana, and British Columbia:

TABLE 5.—*Estimated stumpage of California, Oregon, Washington, Idaho, Montana and British Columbia.*

Kind of timber.	M board feet.	Kind of timber.	M board feet.
Douglas fir.....	374,064,102	Spruce.....	25,419,215
Western and yellow pine.....	175,586,520	Larch.....	5,078,601
Red cedar.....	78,961,383	Miscellaneous and hardwoods.....	5,700,000
Redwood.....	75,000,000		
Hemlock.....	60,848,259	Total.....	850,658,080
Sugar pine.....	50,000,000		

This total is credited by States as follows:

	M board feet.
Oregon	225,000,000
Washington	195,658,080
California	180,000,000
British Columbia	150,000,000
Idaho and Montana	100,000,000

KINDS OF TIMBER.

White pine.—The original stand of white pine (including Norway pine) in the Lake States has been estimated at 350 billion feet, and this does not seem excessive when everything is considered. The total cut of pine in the Lake States since lumbering began there some seventy years ago has probably been not less than 250 billion feet, and there have also been huge losses by fire. The census estimate of the stand of white pine in 1880 was less than 88 billion feet; yet, according to the annual reports of the American Lumberman, the cut since that date has exceeded 170 billion, and the amount yet remaining was placed at 50 billion by the census in 1900 and at 60 billion feet by Long in 1903. The estimate in 1880 for Minnesota was especially low—only 8,170 million feet. More than four times that quantity has since been taken out, and Minnesota is today furnishing over one-third of the white-pine cut of the United States.

Despite these cheerful statements, however, it is well known that the days of white pine are rapidly passing, and even accepting the most sanguine estimates of the present stumpage it will in a few years cease to be a large factor in the timber supply of the United States. The present annual cut is about 3 billion feet in the Lake States and 1 billion in other States. The total is less than half the cut in the Lake States alone in the latter eighties. At the annual meeting of the Northern Pine Manufacturers' Association in Minneapolis, Minn., January 22, 1907, Secretary J. E. Rhodes made this striking statement:

Since 1895, 248 firms, representing an aggregate annual output of pine lumber of $4\frac{1}{4}$ billion feet, have retired from business, due to the exhaustion of their timber supply. Plants representing approximately 500 million feet capacity which sawed in 1906 will not be operated in 1907.

Southern yellow pine.—The census of 1880 estimated the stumpage of southern yellow pine at slightly more than 237 billion feet. The cut from 1880 to 1900 must have been in the neighborhood of 100 billion, and the estimate by the census at the latter date was 300 billion feet. Long disagreed with this, however, and estimated the stand at 187 billion, in 1903, while the Pacific Lumber Trade Journal in January, 1907, placed the present stumpage, in the opinion of the "best-known timber authorities," at 137 billion feet. This would unquestionably be the case were Long's estimate correct, as the cut since 1903 has been at least 40 billion feet. The census estimate of stumpage of yellow pine in the seven most im-

portant States in 1880, Long's in 1903, and the probable cut since 1880 are shown in Table 6. The cut was estimated by assuming the ratio of pine cut to the total lumber cut for each State. The ratio selected is believed to be a conservative one.

TABLE 6.—*Estimated stumpage and cut of yellow pine in seven States.*

State.	Estimated pine stump- age, census 1880.	Estimated pine cut, 1880-1906.	Estimated pine stump- age, Long, 1903.
	<i>M board feet.</i>	<i>M board feet.</i>	<i>M board feet.</i>
Alabama.....	21,345,600	17,500,000	11,250,000
Arkansas.....	41,315,000	15,500,000	10,530,000
Florida.....	6,615,000	13,200,000	10,500,000
Georgia.....	16,778,000	20,100,000	12,000,000
Louisiana.....	48,213,000	16,000,000	45,000,000
Mississippi.....	24,975,000	17,100,000	46,000,000
Texas.....	67,508,500	22,900,000	30,000,000
Total.....	226,756,100	122,300,000	165,250,000

The present annual cut of yellow pine is about 12 billion feet, or a little more than one-third the total cut of all species, and the maximum has probably not been reached. Whether we accept the lowest or the highest estimate of stumpage, it is evident that within ten to fifteen years there will be a most serious shortage of yellow pine.

Spruce.—The stumpage of eastern spruce was estimated at something over 12 billion feet by the census of 1880 and at 50 billion by the census of 1900, the total cut during the period perhaps approximating 30 billion feet. Our ignorance of the actual stand of spruce is further shown by the fact that Long's estimate in 1903 was 18 billion feet, while that of the American Lumberman a year and a half later was 75 billion feet. Maine has always been the great spruce-producing State, and lumbering has gone on steadily there for a longer period than anywhere else in the United States. The spruce stumpage of Maine was placed at 5 billion feet by the census of 1880 and at 21 billion by the State forest commission in 1902. In the meantime probably more than twice the quantity estimated in 1880 had been cut. The present annual cut of spruce in the United States is approximately $11\frac{1}{4}$ billion feet, of which Maine furnishes about one-third.

Hemlock.—The stumpage of eastern hemlock was estimated at 20 billion feet by the census of 1880 and at 100 billion feet by the census of 1900. The present annual cut is approximately 3 billion feet, of which Pennsylvania, Michigan, and Wisconsin furnish

about three-fourths. The cut of both eastern spruce and eastern hemlock is decreasing, while that of the western spruce and hemlock is increasing.

Douglas fir.—The stumpage of Douglas fir was estimated at 300 billion feet by the census in 1900 and at 350 billion by the American Lumberman in 1905. The Pacific Lumber Trade Journal, in the article previously referred to, estimates the stand of fir in Washington alone at over 119 billion feet. The cut of Douglas fir reported for the census year 1900 was not quite $1\frac{3}{4}$ billion feet, while the present cut is about $4\frac{1}{2}$ billion feet, with every indication of a rapid increase in the future.

Western yellow pine.—The stand of western yellow pine was estimated at 125 billion feet by the census of 1900, at 138 billion by Long in 1903, and at 250 billion by the American Lumberman in 1905. It is widely scattered and very difficult to estimate. The present annual cut is about 1 billion feet, with two-thirds of the production in the Pacific Coast States.

Redwood.—The redwood stumpage was estimated at less than 26 billion feet by the census of 1880, and at 75 billion by the census of 1900. The annual cut, which is increasing, is now in the neighborhood of 450 million feet.

Cypress.—The stumpage of cypress, for Florida and Alabama only, was estimated at a little over 2 billion feet by the census of 1880. The census of 1900 gave 65 billion feet for all States, as a probable safe figure, and this has been accepted by later estimators. The annual cut is now about three-quarters of a billion feet, with Louisiana supplying approximately 65 per cent. of the total.

Hardwood.—The amount of hardwood stumpage is very indefinitely known, and is determinable only with difficulty, owing to the scattered and uneven stands. It was estimated at some 435 billion feet by the census of 1880, at possibly 300 billion by the census of 1900, and at 400 billion by the American Lumberman in 1905. Whatever the total stumpage may be, that which is fit for the saw is rapidly decreasing. The hardwood cut in 1900 was 8,634,000,000 feet; in 1904, 6,781,000,000 feet. The present annual cut of hardwoods is about 5 billion feet, consisting of approximately 43 per cent. oak, 12 per cent. poplar, 9 per cent. maple, and lesser amounts of numerous other species.

* * * * *

Such, in brief, are the leading estimates of our forest resources. Though a hasty glance at Table 4 might make it appear that the supply of timber is actually increasing, since some of the later

estimates are the larger, and in several instances much more timber has been cut from certain regions than was estimated as existing in 1880, this inference would be altogether wrong. Many of the early estimates were based wholly upon inadequate data, and also did not include a great deal of timber that is now considered merchantable. As the timber in any region becomes scarcer the minimum cutting limit is constantly lowered, and timber is taken which was formerly rejected. In New England, for example, 6 inches is now a common cutting diameter for white pine, while in some localities on the Pacific coast nothing below 18 inches is cut.

No one who is at all familiar with the situation doubts for an instant that we are rapidly using up our *forest capital*. In fact, it is unquestionably safe to say that our present annual consumption of wood in all forms is *from three to four times as great as the annual increment of our forests*. Even by accepting the highest estimate of the amount of timber standing we postpone for only a few years the time when there must be a great curtailment in the use of wood if the present methods of forest exploitation are continued. Every indication points to the fact that under present conditions the maximum annual yield of forest products for the country as a whole has been reached, and that in a comparatively short time there will be a marked decrease in the total output, as there is now in several items. Neither is there any great supply of timber to turn to outside of the United States. With the exception of importations of small quantities of high-class woods like mahogany, the only promising source is Canada; but most of the timber there will be required at home. Even now Douglas fir is bringing higher prices in Canadian than in American markets. The course of prices of white pine, yellow poplar, and hemlock since 1887 and of yellow pine since 1894 is shown in fig. 2. The quotations are for the first of each year.

FOREST OWNERSHIP.

In view of conditions which undeniably exist it becomes of the utmost importance that vigorous steps be taken to insure a future supply of timber. The most liberal estimate which has been made of the wooded area of the United States—that of the Geological Survey—places it at 700 million acres, while other careful estimators have placed the forest area as low as 500 million acres. Table 7 gives the wooded area of each State according to the Geological Survey, together with the area of National Forests, or Federal forest reserves, that of State forest reserves, and that of the private or unreserved public forests. The latter item was determined by

deducting the area of State or National Forests in each State from the total wooded area, and in consequence of using this method certain sources of error are introduced. The National Forests in Nebraska and Kansas are not wooded areas, but areas which are more suitable for the production of timber than for ordinary agriculture, and they were set aside for the purpose of forest planting. A considerable amount of open land is included within the boundaries of other National Forests; and it is probable that in some States the total wooded area is greater than that estimated by the Geological Survey. Thus, while no figures are given for the private and unreserved public forests in Utah and Wyoming there is quite an area of such forests in these States, and more than is indicated in a number of other States.

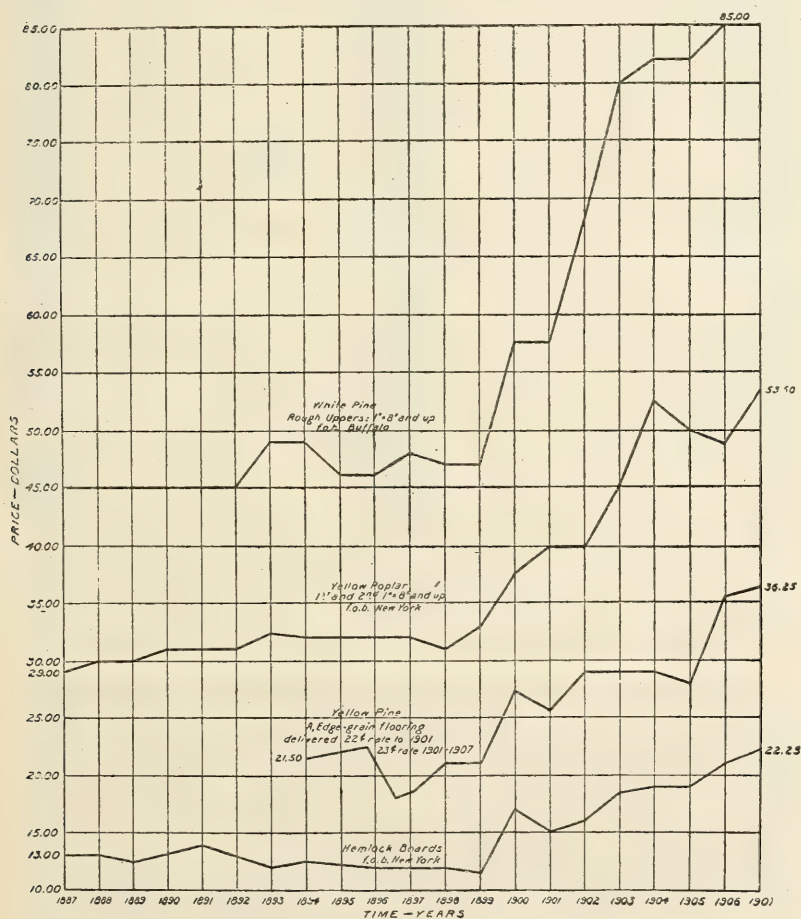


FIG. 2.—Range of lumber prices, 1887 to 1897.

TABLE 7.—*Forest areas.*

State.	Total wooded area.	National forests.	State forests.	Private and unreserved public forests.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Alabama.....	24,512,000			24,512,000
Arizona.....	16,000,000	9,463,725		6,536,275
Arkansas.....	28,800,000			28,800,000
California.....	28,608,000	a21,902,931		6,705,069
Colorado.....	21,440,000	15,748,722		5,691,278
Connecticut.....	1,216,000		1,360	1,214,640
Delaware.....	448,000			448,000
Florida.....	24,128,000			24,128,000
Georgia.....	26,880,000			26,880,000
Idaho.....	22,400,000	a20,336,427		2,063,573
Illinois.....	6,528,000			6,528,000
Indiana.....	6,912,000		2,000	6,910,000
Indian Territory.....	12,800,000			12,800,000
Iowa.....	4,480,000			4,480,000
Kansas.....	3,648,000	97,280		3,550,720
Kentucky.....	14,208,000			14,208,000
Louisiana.....	18,112,000			18,112,000
Maine.....	15,168,000			15,168,000
Maryland.....	2,816,000		3,500	2,812,500
Massachusetts.....	2,688,000			2,688,000
Michigan.....	24,320,000		39,000	24,281,000
Minnesota.....	33,408,000		21,000	33,387,000
Mississippi.....	20,672,000			20,672,000
Missouri.....	26,240,000			26,240,000
Montana.....	26,880,000	20,528,263		6,351,737
Nebraska.....	1,472,000	556,072		915,928
Nevada.....	3,904,000	a2,348,999		1,555,001
New Hampshire.....	3,328,000			3,328,000
New Jersey.....	2,069,760		1,800	2,067,960
New Mexico.....	15,168,000			7,830,436
New York.....	11,968,000	a7,337,564		10,528,012
North Carolina.....	22,592,000		1,439,988	22,592,000
North Dakota.....	384,000			384,000
Ohio.....	5,952,000			5,952,000
Oklahoma.....	2,816,000	60,800		2,755,200
Oregon.....	34,752,000	a16,463,535		18,288,465
Pennsylvania.....	14,848,000		820,000	14,028,000
Rhode Island.....	256,000			256,000
South Carolina.....	13,120,000			13,120,000
South Dakota.....	1,600,000	1,263,720		336,280
Tennessee.....	17,472,000			17,472,000
Texas.....	40,960,000			40,960,000
Utah.....	6,400,000	7,119,472		
Vermont.....	2,496,000			2,496,000
Virginia.....	14,976,000			14,976,000
Washington.....	30,528,000	a12,065,500		18,462,500
West Virginia.....	11,776,000			11,776,000
Wisconsin.....	20,320,000		254,063	20,065,937
Wyoming.....	8,000,000	9,020,475		
Total.....	700,469,760	144,313,485	2,582,711	554,313,511

aApproximate area.

Total National and State Forests, 146,896,196 acres, equal to 21 per cent. of the total wooded area.

Only one-fifth of our forest area is in National or State Forests; four-fifths is either in private hands or likely to pass into private hands. It has been shown that the present annual cut of forest products requires at least 20 billion cubic feet of wood. To produce this quantity of wood without impairing the capital stock our 700 million acres of forest must make an annual increment of 30 cubic feet per acre. Under present conditions of mismanagement and neglect it is safe to say that the average annual increment is less

than 10 cubic feet per acre for the entire area. This means that each year's cut at the present rate takes the growth of more than three years. The average age of the trees which are being felled for lumber this year is not less than 150 years. The lumberman could not afford to replace them were he blessed with the prospect of unequaled longevity, since such long investments are unprofitable for private capital. In consequence there arises the need that the State and National governments, which do not need to look for so high a rate of interest as the private investor and which are concerned with the promotion of the general welfare, should assume the responsibility of providing a future supply of timber.

The forest area of the United States is sufficient, if rightly managed, to produce eventually timber enough to supply every legitimate need. There is no reason why it should not some day be brought up to the point of yielding an annual increment of more than 30 cubic feet per acre, which, as previously said, would supply the quantity of timber now consumed, and which if used economically will be sufficient for a much increased population. The experience of Germany well illustrates the possibilities along this line. The following quotations from an article by Dr. B. E. Fernow, in *Forestry and Irrigation* for February, 1907, present the case clearly:

One hundred and fifty years ago Germany found herself in very much the same condition as regards her forest resources as we are today in the United States—all accessible portions more or less culled, or in poor copice, burnt over, and damaged by cattle, the valuable virgin timber mostly confined to distant and inaccessible locations. Sporadic attempts existed here and there at protection, at regulation of the cut, at conservative lumbering, and still more sporadic attempts at reforestation.

* * * * *

Yet until the beginning of the nineteenth century reduction of supplies without adequate reproduction proceeded, and around the year 1800 the wood famine had become acute, giving rise to the same kind of agitation and literature which we have experienced, even to bringing in the catalpa and other such small, rapid growers as the saviors of the nation.

The severity of the timber shortage in Germany at that time was temporarily relieved through increased production of coal and the building of railroads into hitherto inaccessible forest regions. Then came the vigorous organization of extensive forest reserves and the adoption of a settled policy of forest management, based upon the principle of sustained yield, or the cutting of the increment only, without lessening the wood capital. The results of this policy were, in the words of Doctor Fernow, that—

In Saxony the cut increased during the years 1820 to 1890 just 50 per cent., and up to 1904 has increased by another 5 per cent., namely, to 93 cubic feet per acre, the increase through the whole period being at the rate of 0.5 per cent. annually.

In Prussia the increase is still more pronounced. While in 1830 the cut was 20 cubic feet per acre, and in 1865 increased to only 24 cubic feet, in 1890 it was 52, and in 1904 it had grown to 65 cubic feet; forest management had increased the average acre production in seventy-five years more than threefold.

* * * * *

An acreage of 15,600,000 of German State, municipal, and private forests, lately canvassed, produces an average net revenue of \$2.40 per acre annually. In other words, every acre of this property, good, bad, and indifferent, productive and unproductive, represents a capital of \$50, paying 5 per cent. interest, and this constantly improving.

It must not be overlooked that these results have come largely from non-agricultural lands, the sandy plains, the swamps, the rough mountain slopes, and from forests which in part, at least, were mismanaged like ours.

Can we expect to attain the same or similar results?

We ought to do much better, for we have the hundred years of experience of our friends across the water to draw on, and we can avoid many of the mistakes which they have naturally made and paid for.

Approved:

JAMES WILSON, Secretary.

Washington, D. C., April 16, 1907.

The Waning Hardwood Supply and the Appalachian Forests

BY WILLIAM L. HALL,
Assistant Forester.

HARDWOOD CUT DECLINING.

The hardwood lumber cut in 1899, according to the census,^a was 8,634,021 thousand feet; in 1906 it had fallen to 7,315,491 thousand feet, a decrease of 15.3 per cent.

This decrease took place during a period when American industries sprang forward at a pace unparalleled; when there was the strongest demand ever known for every class of structural material; when the output of pig iron increased 15 per cent., that of cement 132.17 per cent., and even that of softwood timber 15.6 per cent.

That the decrease is due to diminished supply rather than to lessened demand seems to be proved beyond question. During the same period the wholesale price of various classes of hardwood lumber advanced from 25 to 65 per cent.; every kind of hardwood found in quantity sufficient to make it useful has been put on the market, and hardwood timber is now being cut in every State and every locality where it exists in quantity large enough to be cut with profit. These conditions could not prevail were the decrease in production due to a falling off in demand.

CONDITION AS SHOWN BY KIND OF TIMBER.

The most notable shrinkage has been in the leading hardwoods to which the public has been long accustomed.

Oak, which in 1899 furnished over half the entire output of hardwood lumber, fell off 36.5 per cent. Yellow poplar, which in 1899 was second among hardwoods in quantity produced, fell off 37.9 per cent. Elm, the great standard in slack cooperage, went down 50.8 per cent. Cottonwood and ash, largely used in many industries, lost, respectively, 36.4 and 20.3 per cent.

^a The cut of 1899 was reported in the census of 1900. The reports for the years 1904 and 1905 are available, but are less complete, and are, therefore, not quite comparable with the above figures. In each case the figures for those years fall below those for 1906. Acknowledgment is made to the Bureau of the Census for other figures used in this report.

A complete comparison of output for the fifteen leading hardwoods is given in Table 1.

TABLE 1.—*The cut of hardwood lumber, by kinds, 1899–1906.*

Wood.	1899. Thousand feet.	1906. Thousand feet.	Per cent. in- crease (+) or de- crease (—).
Oak.....	4,438,027	2,820,393	—36.5
Maple.....	633,466	882,878	+39.4
Poplar.....	1,115,242	693,076	—37.9
Red gum.....	285,417	453,678	+59.0
Chestnut.....	206,688	407,379	+97.1
Basswood.....	308,069	376,838	+22.3
Birch.....	132,601	370,432	+179.4
Cottonwood.....	415,124	263,996	—36.4
Beech.....	(a)	275,661	.....
Elm.....	456,731	224,795	—50.8
Ash.....	269,120	214,460	—20.3
Hickory.....	96,636	148,212	+53.4
Tupelo.....	(a)	47,882	.....
Walnut.....	38,681	48,174	+24.5
Sycamore.....	29,715	.....	.....
All other.....	208,504	87,637	—58.0
Total.....	8,634,021	7,315,491	—15.3

a Not separately reported.

The table shows clearly the three points already mentioned: First, several of the most important hardwoods are fast being exhausted. Second, the cut has increased in less known and less abundant woods. Maple increased 39.4 per cent. and rose to second place in the list. Red gum gained 59 per cent. and advanced from seventh to fourth place. Chestnut and birch have increased tremendously, and beech and tupelo have been prominently introduced. Third, although almost all possible new woods have been brought into use there has been a shrinkage in the total output of 15.3 per cent.

CONDITION AS SHOWN BY STATES.

An examination of the figures for certain States in which hardwood production has centered in the past shows a condition almost startling. Ohio, with a cut of 918 million feet in 1899, had fallen to 433 million in 1906; Indiana, with 976 million feet in 1899, had fallen to 446 million, and Tennessee's 862 million fell to 535 million. The condition can be realized by a study of Table 2, in which the hardwood cut is given by States for the years 1899 and 1906.

TABLE 2.—*Cut of hardwood lumber, by States, 1899-1906.*

States and Territories.	1899.	1906.	States and Territories.	1899.	1906.
	<i>Thousand board feet.</i>	<i>Thousand board feet.</i>		<i>Thousand board feet.</i>	<i>Thousand board feet.</i>
Alabama.....	105,491	66,409	New Jersey.....	31,871	18,665
Arkansas.....	444,102	528,970	New York.....	207,226	279,601
California.....	539	280	North Carolina.....	145,657	227,568
Colorado.....	75	2,035	North Dakota.....	2,030	.....
Connecticut.....	77,594	86,949	Ohio.....	918,231	432,802
Delaware.....	6,319	8,290	Oklahoma.....	6,065	1,043
Florida.....	2,200	2,299	Oregon.....	2,529	6,971
Georgia.....	42,799	47,510	Pennsylvania.....	520,162	520,162
Idaho.....	.....	3,383	Rhode Island.....	3,988	7,890
Illinois.....	250,361	127,269	South Carolina.....	17,483	18,232
Indiana.....	975,779	446,448	South Dakota.....	558	100
Indian Territory.....	9,378	20,141	Tennessee.....	861,874	535,115
Iowa.....	61,028	19,451	Texas.....	38,056	20,689
Kansas.....	.....	170	Utah.....	.....	71
Kentucky.....	734,386	615,256	Vermont.....	50,423	103,373
Louisiana.....	72,198	102,684	Virginia.....	239,860	267,196
Maine.....	28,730	73,156	Washington.....	5,703	785
Maryland.....	77,581	109,523	West Virginia.....	570,208	561,588
Massachusetts.....	42,147	62,270	Wisconsin.....	519,031	513,561
Michigan.....	811,649	783,241	Wyoming.....	.....	220
Minnesota.....	61,956	29,071	Arizona, Nevada, New	.....	.....
Mississippi.....	207,322	286,168	Mexico.....	.....	.....
Missouri.....	442,236	314,093	Nebraska.....	14,428	.....
Montana.....	1,300	5,084			
New Hampshire.....	23,468	59,709	Total.....	8,634,021	7,315,491

This table is convincing as to two things: First, the supply in Indiana and Ohio, the original center of hardwood production, is practically exhausted; second, the cut is now widely distributed and is heavy in every State where there are even small bodies of hardwoods.

Together with Illinois, Ohio and Indiana produced 25 per cent. of the hardwood in 1899. In 1906 they produced only 14 per cent. They can never regain their lead, or even maintain the standing they have. Their many wood-using establishments, which are now hard pressed for supplies, will exhaust their remaining remnants within a few years. The land which bore this timber, as fast as it was cleared, was turned to agricultural use, for which most of it is well suited. The improved farm lands of Indiana increased 10.4 per cent. between 1890 and 1900; those of Ohio, 4.9 per cent. In both States there is some waste land which will continue in timber and turn out local supplies, but not enough to have any considerable effect on the country's hardwood supply.

States not thought of in former years for their hardwoods are now turning out considerable quantities. Maine, with a cut of 29 million feet in 1899, went to 73 million in 1906; New Hampshire turned out 60 million in 1906 as against 23 million in 1899. Even Oregon, Montana, and other Western States came into the list with unexpected amounts. In all of the States west of the Mississippi

Valley the supply is small and can never become much of a factor.

The impressive thing is that we are bringing hardwoods from far and near, and still the cut is going down.

CONDITIONS IN MAIN REGIONS OF PRODUCTION.

The main production is now in the Lake States, especially Michigan and Wisconsin, the lower Mississippi Valley, and the Appalachian Mountains. What are the conditions in these regions?

LAKE STATES.

The three Lake States furnished 18 per cent. of the hardwood cut in 1906, as against 16 per cent. in 1899. This percentage increase does not mean a real increase. On the contrary, every one of the Lake States fell off, though altogether their cut did not decrease in proportion to that of the rest of the country. The figures seem to indicate unmistakably that their maximum production has been reached. If this is true, then their decline in the future is likely to be almost as rapid as that of Ohio and Indiana, because of the nearness of many large hardwood-using industries which will make heavy demands upon the supply. This is now the supply nearest to many of the great plants in Illinois, Indiana, and Ohio.

The hardwoods in the Lake States stand upon good loam soil which, though stony in places, produces the finest of grasses. Where arable, this soil yields good crops of hay and potatoes, and in some localities grain and fruit. So invariably do the hardwoods indicate good soil that they are one of the most common means of land classification. And since hardwood land always means good soil, land from which hardwoods are cut does not revert to the State, as has been frequently the case with pine land, especially in Michigan. The hardwood land is held until it can be sold to farmers who clear it and turn it permanently to agricultural use, for which, as in Ohio and Indiana, it is fundamentally suited.

The southern part of Michigan, which originally bore magnificent hardwoods, was the first part of the State to be cleared, and is now the backbone of Michigan's agriculture. Just as fast as the hardwoods, even in the northern peninsula, are cut the land will be settled for farming. The same is true of Wisconsin and Minnesota. The almost complete exhaustion of their timber supply and the transformation of their hardwood lands into farms are apparently the only results to be expected.

LOWER MISSISSIPPI VALLEY.

The States of the lower Mississippi Valley, including Missouri, Arkansas, Texas, Louisiana, and Mississippi, produced in 1899 1,203,914 thousand feet, or 14 per cent. of the entire output, of hardwood lumber. In 1906 they produced 1,252,604 thousand feet, or 17 per cent. of the country's output. The percentage gain, it will be seen, represents a very slight absolute gain. Missouri and Texas declined somewhat, while Arkansas, Mississippi, and Louisiana made considerable increase. The figures indicate that this group of States has nearly, if not quite, reached its maximum cut. In these States, following the rule already noticed, the hardwoods are found on very fertile soil. They center in the lowlands—the river bottoms and the swamps. On account of their great fertility these lands are now desired for farming, and clearing, and even drainage where necessary, are being hastened in order to turn them to the production of cotton, corn, and other crops. An exception, of course, exists in the Ozark Mountains of Missouri and Arkansas, certain portions of which are better adapted to hardwood timber than to other uses. Such areas are relatively small. In the main, those mountains have a climate and a soil which adapt them to fruit growing, for which the Ozark section has already become noted. In common with the whole lower Mississippi Valley, this region must be expected to change largely from a timbered to an agricultural condition.

APPALACHIAN STATES.

The States which are here considered to form the Appalachian group are as follows: Maine, New Hampshire, Vermont, Massachusetts, New York, Pennsylvania, Maryland, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, and Alabama. They turned out in 1899, 3,667,495 thousand feet of hardwood, which was 42 per cent. of the total cut. In 1906 they produced 3,546,668 thousand feet, or 48 per cent. They thus increased their proportion 6 per cent., although they actually fell off 121 million feet.

While but small parts of several of these States lie in the mountains, it is true of the region as a whole that the bulk of their hardwood timber is now to be found in the mountains. The Appalachian Mountains must have fully half of the country's present supply of hardwood, in spite of the fact that heavy cutting has been going on in them for over a hundred years.

There are two main reasons why this region has borne such heavy

cutting and still contains so much of the supply. In the first place, the mountains are nonagricultural. There has been no wholesale tendency to clear them for farming. Profitable farming exists, as a rule, only in the valleys and on the lower slopes. Many sporadic attempts have been made to farm the higher mountains, especially in the Southern Appalachians, but the farms have been small and generally unprofitable. After the pioneers' patience or endurance has been exhausted the forest has slowly crept back and reclaimed the land, from which it never should have been removed.

In the second place, inaccessibility accounts for the continued forest character of the Appalachian region. With the low prices which prevailed until a few years ago, it did not pay to bring the timber down from the higher mountains. So it was allowed to remain.

While other causes may have had local influence, these conditions in the main account for the fact that the Appalachians have maintained their hardwood production. Nevertheless, some of the Appalachian States have gone back badly. Kentucky and Tennessee show heavy declines. In these States the lumbermen have gone farther and farther into the forest, until, even in the most inaccessible parts, little virgin growth remains.

It is only in the extreme portions of the mountains that the cut has held up or increased. Maine, New Hampshire, and Vermont in the North, and North Carolina in the South, show increased cuts. Not one of these States, however, shows anything like the production that Ohio, Indiana, Kentucky, or Tennessee has shown in the past.

The plain truth is that in the Appalachians, as in the other regions, the hardwood lumbermen are working upon the remnants. The supply is getting short and the end is coming into sight.

HOW LONG WILL THE SUPPLY LAST?

In view of existing situation, it is important to consider as closely as possible how long the hardwood supply will last. To reach any conclusion on this point we must know, approximately, how much hardwood we are using yearly, and we must know or estimate the available supply.

While we know within reasonably close limits how much hardwood is used for the manufacture of lumber, we do not know how much is cut for other purposes. Enormous quantities are required each year for railroad ties, telephone and other poles, piles, fence posts, and fuel, and a great amount is wasted in lumbering and

manufacture. The present lumber cut of 7 1-3 billion feet represents probably not one-third of the hardwoods yearly used. Twenty-five billion feet yearly is certainly not a high estimate.

The amount of standing hardwoods is still more uncertain. There has been no census of standing timber, and there have been but few estimates. The largest estimate sets the figure for hardwoods at 400 billion feet. If we are using hardwoods at the rate of 25 billion feet per year, this would mean a sixteen years' supply. The conditions during the past few years suggest no reason for increasing this estimate. A distinct difference exists between the softwood and the hardwood situation. The supply of softwoods east of the Mississippi is running low almost as fast as that of hardwoods. Of softwoods, however, a large supply exists on the Pacific coast, which will suffice for a number of years after the eastern supply is exhausted. There is no hardwood supply in the Far West. When the supply in the Central Eastern States is gone there will be no other source to which to turn.

ADVANCING PRICES OF HARDWOODS.

Only within the last eight years have prices begun to reflect the dwindling supply, though the immoderate cutting away of this resource has been going on for decades. The diagram (fig. 1) shows the advance in prices of some of the principal hardwoods during the past eight years. It also shows the almost steady level of prices previous to 1898.

Considering the impoverished supply and the tremendous demands on the part of all the industries for timber, there is nothing surprising about the increase, which seems not quite to have kept pace with the increasing prices of softwoods. This is rather remarkable in view of the shorter supply, but is probably due to the fact that softwoods, forming the main bulk of the lumber supply, have led in establishing prices.

Along with the increase of prices there has been an almost constant, and an entirely necessary, relaxation of the rules by which lumber is graded and sold. The latest and most significant change is that made by the National Hardwood Lumber Association at its meeting in Atlantic City in May, 1907. Heretofore only even lengths, such as 6, 8, and 10 and 12 feet have been upon the market. The changed rules allow even lengths down to 4 feet and 15 per cent. of odd lengths above 4 feet. Smaller standards of thickness are also allowed. Many other equally significant changes are included. It emphasizes the fact that we are down to the rock bot-

tom, and require every sound piece of hardwood lumber that can be put upon the market.

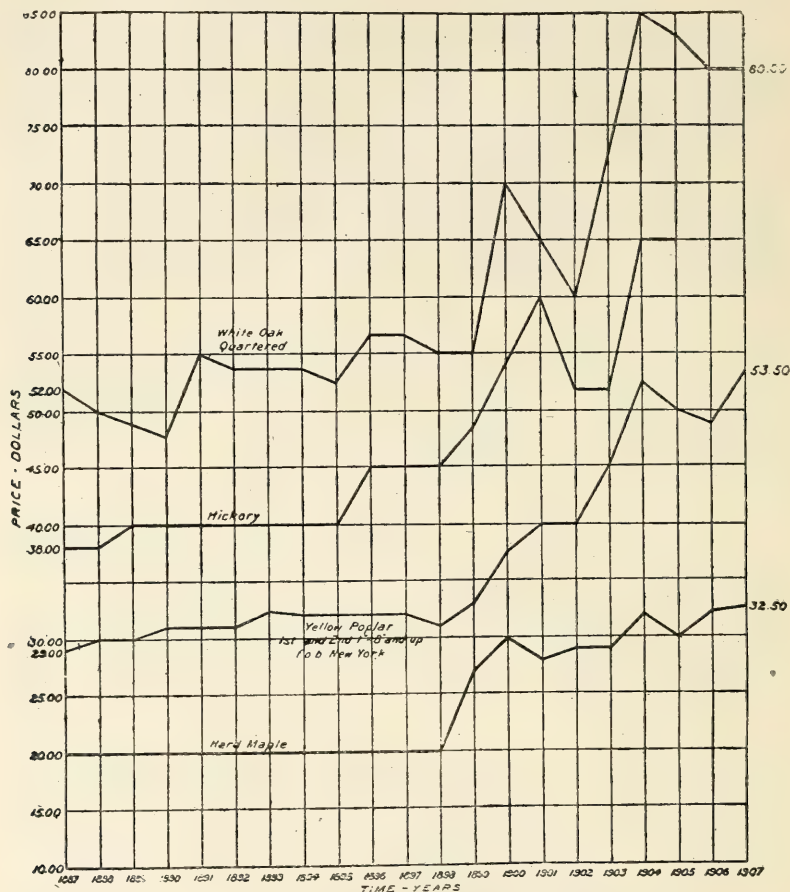


FIG. 1.—Increasing prices of hardwoods, 1887-1907.

WHAT INDUSTRIES WOULD A HARDWOOD SHORTAGE AFFECT?

Several great industries use hardwood timber mainly or almost exclusively for their raw material. Notable in this list are hardwood lumber manufacturing, the cooperage, furniture, and vehicle industries, and the industries engaged in the manufacture of musical instruments, coffins, and small wooden ware. All of these would suffer greatly and some would fail entirely upon the exhaustion of the hardwood supply. Other industries, such as the manufacture of agricultural implements, freight and passenger cars, boxes and crates, use immense quantities of hardwood.

HARDWOOD LUMBER MANUFACTURE.

Hardwood lumber manufacture affords an example of the damage already done. It has been shown how hardwood lumber production in Ohio was cut down over one-half between 1899 and 1906. The decrease in products between 1900 and 1905, according to census reports, amounted to \$7,212,345, or 57.4 per cent., and the rank of the industry in the State fell from the fourth to the twentieth place. The number of employes fell from 10,689 to 6,442, or 40 per cent.

In Indiana during the same period the lumber industry fell from the third to the eighth place; the value of products decreased 27.1 per cent.; the number of wage-earners decreased 42.6 per cent., and the wages paid decreased 36.6 per cent.

Lumber manufacturing is the first among the industries to feel the blight of an exhausted timber supply. When the local supply ceases this industry must stop. Most other industries which use hardwoods can go on, bringing their supplies from a distance. Only with the failure of the entire supply are they seriously damaged.

COOPERAGE.

In much the same way the cooperage industry must be near the forest. Slack cooperage employs a great number of hardwoods and is distributed through many States. Tight cooperage makes use of the best grades of white oak almost exclusively and centers in Kentucky and Tennessee. The pressure of the timber supply is already heavy on this industry. If the oak supply should fail, the tight cooperage industry will largely cease, and some other container for liquids will have to be found to replace wood. As yet little progress has been made in securing substitutes for the oak cask and barrel.

FURNITURE MAKING.

The manufacture of furniture probably calls for more hardwood than any other industry, and employs hardwood almost exclusively as raw material. In 1905 there were 2,482 furniture establishments in the United States, with a capital of \$153,000,000 and an annual product valued at \$170,000,000. In reports made to the Forest Service 538 of these establishments reported the annual use of 580 million feet of lumber. It seems probable that the industry requires upward of 20 per cent. of the entire hardwood production. The public is so much accustomed to hardwood furni-

ture that furniture of any other material would not be acceptable. Failure of the hardwood supply would doubtless terminate the furniture industry as it is now carried on.

MUSICAL INSTRUMENTS.

As in furniture, hardwood is the chief material in the manufacture of musical instruments, especially pianos and organs. Maple, poplar, elm, oak, chestnut, and basswood are most largely used. Foreign woods are used only for veneers, for which purpose large quantities are not required.

VEHICLE MANUFACTURE.

In 1905 there were in the United States 5,143 establishments for the manufacture of vehicles, with a capital of \$149,000,000 and a yearly product of \$155,000,000. No industry stands in a more threatened position, so far as supply is concerned, than the manufacture of wagons and carriages. It requires the best hardwoods, and even now these are obtained with extreme difficulty. Hickory and oak are used in the largest quantities, and vehicle manufacturers believe that the hickory supply of the country can not last over ten years longer. Attempts to substitute other woods or other materials for hickory in vehicle manufacture have largely failed. The vehicle industry, like the furniture industry, can not exist on its present basis without hardwood timber.

AGRICULTURAL IMPLEMENTS.

Metal has to some extent taken the place of wood in farm implements, but surprisingly large quantities of hardwood are still used. Recent reports from 167 manufacturers show the use of 212,613,000 feet of lumber annually, by far the larger part of which is hardwood. Since in 1905 there were 648 manufacturing establishments in the United States, the quantity used must really be very great. Hardwood will undoubtedly be used in this industry as long as it is available.

CAR BUILDING.

Car building has required, and still requires, an enormous amount of hardwood material. Though steel is being employed more largely than in the past in the construction of both freight and passenger cars, the great majority of both classes of cars are still made of wood and the specifications of the railroads indicate that much of the timber used is hardwood.

RAILROAD TIES.

Hardwoods have been, and still are, most essential for railroad ties. Half of the hundred million ties used yearly are of hardwood. Hundreds of patents exist for ties of other material. None has commended itself to railroads as a general substitute for the wooden tie. Very large quantities of hardwood are likewise used for bridges and trestle work.

TELEPHONE AND OTHER POLES.

The pole lines of the country have also called for a great deal of hardwood timber. Every year the demand is increasing. No other material has proved satisfactory for the support of the network of wires which now binds together every part of the country.

HOUSE FINISHING.

House finishing, including interior woodwork, doors, window sashes, stair work, and mantels consumes each year a great deal of hardwood. For durability and acceptability hardwood finds here one of its most desirable uses. In well-built houses in many parts of the country hardwood finishing is almost as commonly found as is hardwood furniture.

WHAT STATES WOULD BE MOST AFFECTED.

Below is given a tabular statement showing the rank of the most important States in the leading hardwood industries, as shown by the census reports. The rank is based upon value of products, except in lumber manufacturing, where it is based on quantity of product.

TABLE 3.—*Rank of most important States in hardwood industries.*

Industry.	Illinois.	Indiana.	Ohio.	New York.	Michigan.	Pennsylvania.
Lumber manufacture (census 1900) ^a		1	2		4	
Planing mills.....	3		4	1	5	2
Agricultural implements.....	1.	6	3	2	5	
Carriages and wagons.....	5	2	1	3	4	
Furniture.....	2	4	5	1	3	
Car building.....	1	4			3	2
Musical instruments.....	2			1		

^aThe census of 1900 is used in order to show the rank of Indiana and Ohio before their timber supply declined.

The statement shows how substantially the hardwood industries center in the States of Illinois, Indiana, Ohio, Michigan, and New York. Of these only Michigan and New York have now any con-

siderable hardwood supply of their own. Illinois, Indiana, and Ohio are dependent upon the Lake States, the lower Mississippi Valley States and the Appalachian States.

The main consideration, however, is that if the hardwood timber supply were to be speedily exhausted the great industries which now depend upon it would be severely crippled or ruined. To consider how important these are, take, for instance, the State of Illinois. Though Illinois is not known as an important hardwood State, Table 3 shows it to be second only to New York in hardwood manufacturing industries. In these industries Illinois has invested, according to the census of 1905, a capital of \$148,115,805—almost one-fifth of the total capital invested in manufacturing. It employs 59,844 wage-earners, and it turned out, in 1905, a product valued at \$139,970,590, or 12 per cent. of the total value of manufactured products.

Exhaustion of the hardwood supply assuredly means the loss of these industries to the States in which they are at present located, just as Ohio and Indiana have already lost the main part of their hardwood lumber manufacturing. Such industries can not exist after their supply of raw material is gone.

SITUATION CONCERNS ENTIRE COUNTRY.

How intensely the whole country would feel the loss of its hardwood timber, to an ample supply of which it has long been accustomed, can scarcely be realized. Without hardwood for building purposes, for railroad ties, for the manufacture of furniture, cooperage, and vehicles, and for the varied other uses to which it is put, we should be in sad straits indeed. A general failure in crops may affect industrial conditions for a few years—a failure in the hardwood supply would be a blight upon our industries through more than a generation. The situation in brief is this: We have apparently about a fifteen years' supply of hardwood lumber now ready to cut. Of the four great hardwood regions, the Ohio Valley States have been almost completely turned into agricultural States, and the Lake States and the Lower Mississippi Valley are rapidly following their example.

In the Appalachian Mountains we have extensive hardwood lands which have been culled and greatly damaged by fire. These are practically all in private hands, and while they contain a large amount of inferior young timber, they are receiving little or no protection, and even such young timber as exists is making but slight growth. Even if these cut-over lands be rightly managed

they can not greatly increase their yield of merchantable timber inside of from thirty to forty years.

The inevitable conclusion is that there are lean years close ahead in the use of hardwood timber. There is sure to be a gap between the supply which exists and the supply which will have to be provided. How large that gap will be depends upon how soon and how effectively we begin to make provision for the future supply. The present indications are that in spite of the best we can do there will be a shortage of hardwoods running through at least fifteen years. How acute that shortage may become and how serious a check it will put upon the industries concerned can not now be foretold. That it will strike at the very foundation of some of the country's most important industries is unquestionable. This much is true beyond doubt, that we are dangerously near a hardwood famine and have made no provision against it.

THE SOLUTION.

If it is true that the hardwood supply is approaching a condition of shortage which would paralyze many of the great industries and gravely affect the entire country, then it is important to seek diligently the best means to avert it, or if that is not wholly possible, to reduce its injuries to the minimum.

The belief is common that the substitution of softwood, metal, and concrete for hardwood will gradually take place as the supply of the latter is reduced. Already the substitution of metal has made much progress. It has replaced hardwood to a considerable extent in the manufacture of implements, furniture, and cars, and even in the interior finish of office buildings and in general construction work. Concrete has also come into wide use in construction. Yet, prominent as these materials have become, they seem not to have reduced the demand for hardwood, which, besides being retained for the greater number of its original uses, has also found new ones. There is not now much tendency for soft woods to replace hardwoods, and there is not likely to be, because they have not the strength or other properties to make them acceptable as substitutes. The replacement of hardwood by other materials is to be welcomed where those materials make for better service and cheaper cost. Where they will not, and experience thus far shows this list to be a large one, the problem of a hardwood shortage must be solved in another way.

There seems to be but one practicable solution, and that is to maintain permanently under a proper system of forestry a suffi-

cient area of hardwood land to produce by growth a large proportion of the hardwood timber which the nation requires.

Where is this land to be found? Not in the Ohio Valley, the Lakes States, or the Mississippi Valley, for the reasons already given. It is to be found in the Appalachian Mountains. These mountains increased their proportion in the nation's hardwood output from 42 to 48 per cent. during the past seven years. On the principle of using the land for its highest purpose they should further increase their proportion to not less than 75 per cent. Other sections of the country will readily furnish the remaining 25 per cent.

APPALACHIANS THE KEY TO THE SITUATION.

The mountain ranges from Maine to Alabama should be made to produce the greater part of the hardwood supply, because growing hardwood timber is their most profitable use. There is, in fact, no other use to which the surface of these mountains can permanently be put. That they can not be successfully farmed has been proved in thousands of cases. For the most part they can not even be permanently grazed.

It is in the production of timber that they excel. They bear the greatest variety of species and the best remaining hardwood growth anywhere to be found. Freed from their enemies—fire and unwise cutting—their forests readily reproduce the best kinds of timber. Outside of local areas of the Pacific coast nowhere else is forest growth so rapid. Even land cleared and farmed to the complete exhaustion of its soil will in this region in time reclothe itself with forests, if only it is protected.

Field estimates by counties show that south of Pennsylvania there are in the Appalachians 58 million acres of forest land, practically all of which is covered by hardwood and over 85 per cent. of which is in a cut-over or culled condition. Including the mountains of Pennsylvania, New York, and New England it is probably safe to estimate that the entire Appalachian area includes as much as 75 million acres primarily adapted for hardwood timber. Only a very small part of this is still in virgin growth. By far the greater part of it has been cut over, and some of it has been cleared.

Well managed and protected from fire, this area has enormous producing powers. Studies by the Forest Service of average virgin and cut-over lands in eastern Tennessee show that under protection these lands are capable of producing 50 cubic feet of wood per acre annually. Even taking the production as 40 cubic feet, this means

for the area of 75 million acres a possible annual production of 3 billion cubic feet.

How does this compare with the annual requirements? The 25 billion feet, board measure, used annually (allowing a product of 8 feet B. M. for each cubic foot, which is believed to be not too high under present utilization) represents a little over 3 billion cubic feet. This is just about equal to the amount which the Appalachian forest is capable of producing. When it is remembered that the Appalachians will probably not be called upon to furnish more than three-fourths of the total supply, it is clear that there is a good margin of safety. Therefore, if the Appalachian forests are rightly managed and taken soon enough, they will insure continuously the hardwood supply of the country, and do it without exhausting the forest. In fact, it can be done so that the systematic treatment will at the same time improve the forest.

Our experience will doubtless be the same in this respect as that of Germany.* In Saxony the cut, which represents only the growth, increased during the period from 1820 to 1904 55 per cent, bringing the annual yield to 93 cubic feet per acre. Prussia shows a still more pronounced increase. In 1830 the cut was only 20 cubic feet per acre, and in 1865 had increased to only 24 cubic feet. But in 1890, owing to proper management, it had risen to 52, and in 1904 to 65 cubic feet. These results came largely from nonagricultural lands, sandy plains, swamps, and rough mountain slopes, and from forests which had been mismanaged, much the same as ours.

Much of the Appalachian forest has been so damaged that years will be required for it to reach again a high state of productiveness. Its present average production is probably not over 10 cubic feet per acre per year. The increase would of course be gradual and it would be slow at first. It would be some time before it could average the 40 cubic feet per acre used in the above estimate. Until it does we can expect a shortage in hardwood timber. The longer the delay in putting this forest under control, the longer continued and more extreme will be the shortage.

Approved: JAMES WILSON, Secretary of Agriculture.

*From article by Dr. B. E. Fernow, Forestry and Irrigation, February, 1907.

The Lumber Cut of the United States in 1905

BY R. S. KELLOGG,
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During the past year the Forest Service has for the first time attempted to gather detailed statistics of the lumber cut of the United States. This task was undertaken in cooperation with the National Lumber Manufacturers' Association, whose members cut at least one-third of the lumber annually manufactured in the United States. The work was done almost entirely through correspondence. It was new and unfamiliar both to those who had it in charge and to the reporting manufacturers. The resulting figures, secured in spite of these handicaps, while not complete, are certainly as nearly complete as could have been expected.

The first request for statements of cut was sent to the manufacturers early in January, 1906. To those who failed to report, a second request was sent in March, and a third in April. At the annual meeting of the National Lumber Manufacturers' Association, in St. Louis, May 9, a preliminary tabulation covering 27,738,000,000 feet of lumber, cut by 11,232 firms, was presented. Subsequently other manufacturers reported, and some additional figures for delinquent firms were furnished by the North Carolina Pine Association, the Yellow Pine Manufacturers' Association, the Southern Cypress Association, the Northern Pine Manufacturers' Association, the Western Pine Manufacturers' Association, the Pacific Coast Lumber Manufacturers' Association, and the Forest, Fish, and Game Commission of New York. The information given by the two organizations last named was so full that the data for the States of Washington and New York are practically complete.

The final tabulation shows that 11,666 establishments cut 30,502,961,000 feet of lumber in 1905. According to these figures both the number of establishments and the total cut are lower than the Census showing for 1899 and for 1904. The Census figures do not cover custom mills, while a few such mills are included in the Forest Service reports. In Table 1 the statements for the three years are printed side by side. In the right hand column of this table is given the ratio which the figures for 1905 bear to those of 1904.

TABLE 1.—*Comparison of Census figures upon the lumber cut of the United States in 1899 and 1904 with those of the Forest Service for 1905.*

Product.	Census, 1899 (23,053 estab- lishments).	Census, 1904 (19,127 estab- lishments).	Forest Service, 1905 (11,666 establishments).	Ratio of Ser- vice figures for 1905 to Census figures for 1904 (establishments 61.0 per cent.).
	<i>M feet.</i>	<i>M feet.</i>	<i>M feet.</i>	<i>Per cent.</i>
Yellow Pine.....	10,231,140	12,812,307	9,760,508	76.0
White pine.....	7,349,108	5,253,846	5,106,783	97.3
Douglas fir.....	1,725,968	2,929,534	4,319,449	147.2
Hemlock.....	3,285,045	3,268,787	2,804,083	85.8
Oak.....	3,848,363	2,902,855	1,833,769	63.2
Spruce.....	1,409,333	1,303,886	1,165,940	89.7
Yellow poplar.....	1,042,380	853,554	582,748	68.3
Cypress.....	492,761	749,592	753,369	100.5
Maple.....	605,654	587,558	608,746	103.7
All others.....	3,475,098	3,473,220	3,567,566	102.8
Total.....	33,464,850	34,135,139	50,502,961	89.0

The incompleteness of the returns for 1905 does not wholly explain the lower figures for that year, especially as to the number of establishments. The cut of 1905 in the Forest Service figures is 89.0 per cent. of the Census figures for the cut of 1904, but the establishments reporting to the Service numbered but 61.0 per cent. of those given in the Census. The establishments which failed to report to the Service were, however, mainly small ones. Thus, though the failure of many establishments to report has necessarily kept the given total cut below its true figure, the delinquent reports, if obtained, would not raise the given total cut proportionately.

A second fact to be borne in mind is that the actual number of establishments is on the decline. This is borne out by the Census figures of 1899 and 1904, which show a falling off of nearly 4,000 in the number of establishments during the period. During the same period the total cut increased, though not greatly. Had the number of establishments reporting to the Service in 1905 borne the same relation to those reporting to the Census in 1904 as the latter bore to those reporting to the Census in 1899, the Service figures for total cut would doubtless have shown a similar, perhaps a greater, increase. For the establishments of 1904 numbered 82.9 per cent. of those of 1899, while those of 1905, as already noted, numbered only 61.0 per cent. of those of 1904.

In other words, there is a clear tendency toward a reduction in number of establishments, together with a gain in individual output. Two causes account for this tendency—the end of supply is being reached in some localities, particularly with white pine stumpage in the Lake States, and the concentration of capital, as in

other industries, is resulting in the consolidation of plants in fewer hands.

Not all sections of the country, and, consequently, not all woods, are proportionately represented in the figures. Many of the operators of rather small hardwood mills in the Central States and of yellow pine mills in the Southern States did not report, and even the aid of association secretaries failed to secure data from them.

The Census gives the total value of the lumber cut of the United States in 1904 as \$435,708,084. There was a marked rise in lumber prices in 1905, however; so it is safe to say that the value at the mills of the cut for that year was between \$475,000,000 and \$500,000,000.

SUMMARY OF PRODUCTION.

The total cut of yellow pine was probably little, if any, greater in 1905 than in 1904. The cut of white pine was certainly no greater. The cut of Douglas fir increased remarkably, because the capacity of old mills was increased and many new ones were added. The cut of fir in 1904 was also below normal, owing to unfavorable market conditions. There was probably a small decrease in hemlock. There was probably a slight decrease in the cut of spruce. The Census shows a decrease of 34 per cent. in oak from 1899 to 1904, and this decrease is undoubtedly continuing. There was also some decrease in poplar, a continuation of the decrease of 18 per cent. shown in the Census returns between 1899 and 1904. There was evidently an increase in cypress, maple, and the miscellaneous group, including a large number of species of minor importance, many of which are being substituted for those which are obtained with increasing difficulty.

Table 2 gives the kind and quantity of lumber cut by the 11,666 establishments from which the Forest Service received reports. Yellow pine is far in the lead, with 8,771,966,000 feet, or 28.8 per cent. of the total cut; and this lead would have been increased to at least 34 per cent. if full reports had been secured. White pine follows, with 4,868,020,000 feet, or 16 per cent.; next Douglas fir, with 4,319,479,000 feet, or 14.2 per cent.; then hemlock, with 2,804,083,000 feet, or 9.3 per cent. The relative rank of the various species is shown graphically in figure 1.

TABLE 2.—*Kind and quantity of lumber cut in the United States in 1905 by 11,666 mills.*

Kind.	M feet.	Per cent.	Kind.	M feet.	Per cent.
Yellow pine.....	8,771,966	28.8	Cottonwood.....	236,000	0.8
White pine.....	4,868,020	16.0	Elm.....	227,038	.7
Douglas fir.....	4,319,479	14.2	Chestnut.....	224,413	.7
Hemlock.....	2,804,083	9.3	Beech.....	219,000	.7
White oak.....	1,210,216	4.0	Ash.....	159,634	.5
Spruce.....	1,165,940	3.8	Sugar pine.....	123,085	.4
Western yellow pine.....	988,542	3.2	Western white pine.....	115,678	.4
Cypress.....	753,369	2.5	Hickory.....	95,803	.3
Red oak.....	623,553	2.0	Other kinds.....	294,512	1.0
Maple.....	608,746	2.0	Mixed.....	519,865	1.7
Poplar.....	582,748	1.8			
Redwood.....	411,689	1.3	Total softwoods.....	24,914,618	81.3
Cedar.....	363,900	1.2	Total hardwoods.....	5,588,343	18.7
Red gum.....	316,588	1.0			
Basswood.....	258,390	.9	Grand total.....	30,502,961	100.0
Birch.....	240,704	.8			

The rapid reversal which is taking place in the positions of white pine and Douglas fir is shown by the fact that in 1899 the former produced 21.5 per cent. of the lumber cut and in 1905 only 16 per cent., while the latter, which produced only 5 per cent. in 1899, in

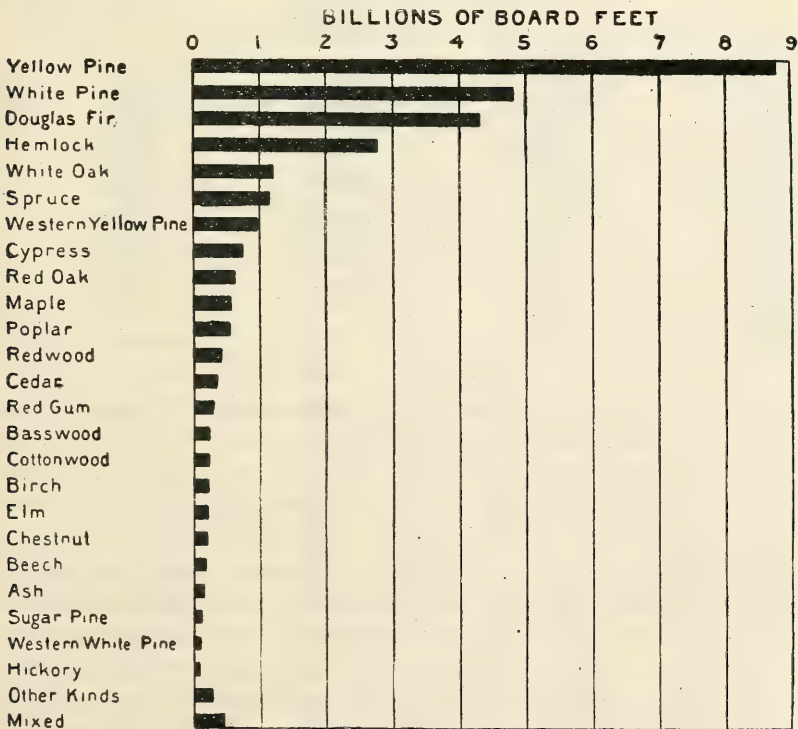


FIG. 1.—Lumber production, by species, 1905.

1905 produced 14.2 per cent. The other species are given in order of importance. The kinds not specified include larch, tamarack, tupelo, balsam, and walnut, which are cut in relatively small amounts. The detailed figures for them will be found in Tables 28 and 29. The heading "Mixt" includes all reports which did not give the kind of timber cut or which gave it in such a way that the amounts of several species could not be determined. It may, however, be safely assumed to be practically all hardwood. The table shows that the amount of softwood reported was 24,914,618,000 feet, or 81.3 per cent. of the total cut, and that the amount of hardwood reported was 5,588,343,000 feet, or 18.7 per cent. of the total cut. In 1899 the softwoods furnished about 75 per cent. of the total and the hardwoods about 25 per cent. The changed ratio is due mostly to the increased cut of yellow pine and Douglas fir and the falling off in oak and poplar.

TABLE 3.—*States which produced over 100,000,000 feet of lumber in 1905; reports from 11,666 mills.*

State.	M feet.	Per cent.	State.	M feet.	Per cent.
Washington.....	3,917,166	12.8	Florida.....	658,007	2.2
Wisconsin.....	2,543,503	8.3	Tennessee.....	540,920	1.8
Louisiana.....	2,293,809	7.5	South Carolina.....	466,478	1.5
Minnesota.....	1,925,804	6.3	Kentucky.....	464,676	1.5
Michigan.....	1,719,687	5.6	Missouri.....	362,217	1.2
Arkansas.....	1,488,589	4.9	Indiana.....	352,362	1.2
Pennsylvania.....	1,397,164	4.6	New Hampshire.....	340,727	1.1
Mississippi.....	1,299,390	4.3	Ohio.....	331,552	1.1
Oregon.....	1,262,610	4.1	Vermont.....	266,676	.9
North Carolina.....	1,080,602	3.5	Massachusetts.....	252,804	.8
California.....	1,061,608	3.5	Idaho.....	212,725	.7
Texas.....	929,863	3.1	Montana.....	189,291	.6
Alabama.....	843,897	2.8	Maryland.....	163,749	.5
New York.....	750,280	2.5	Iowa.....	129,472	.4
Maine.....	745,705	2.5	Illinois.....	119,065	.4
Virginia.....	715,197	2.4	All others.....	292,060	.9
Georgia.....	712,604	2.3			
West Virginia.....	672,902	2.2	Total.....	30,502,961	100.0

Table 3 gives the 33 States which produced over 100,000,000 feet of lumber each, according to the reports received by the Forest Service. Washington leads with 3,917,166,000 feet, or 12.8 per cent. of the total amount reported, followed by Wisconsin with 2,543,503,000 feet, or 8.3 per cent.; next Louisiana, with 2,293,809,000 feet, or 7.5 per cent.; then Minnesota, with 1,925,804,000 feet, or 6.3 per cent.; and fifth Michigan, with 1,719,687,000 feet, or 5.6 per cent. From no other State does the amount reported exceed 5 per cent. of the total. The 11 States which reported a cut of over 1,000,000,000 feet each, produced two-thirds of the lumber reported for the entire United States. The relative rank of the 33 States given in Table 3 is shown graphically in figure 2.

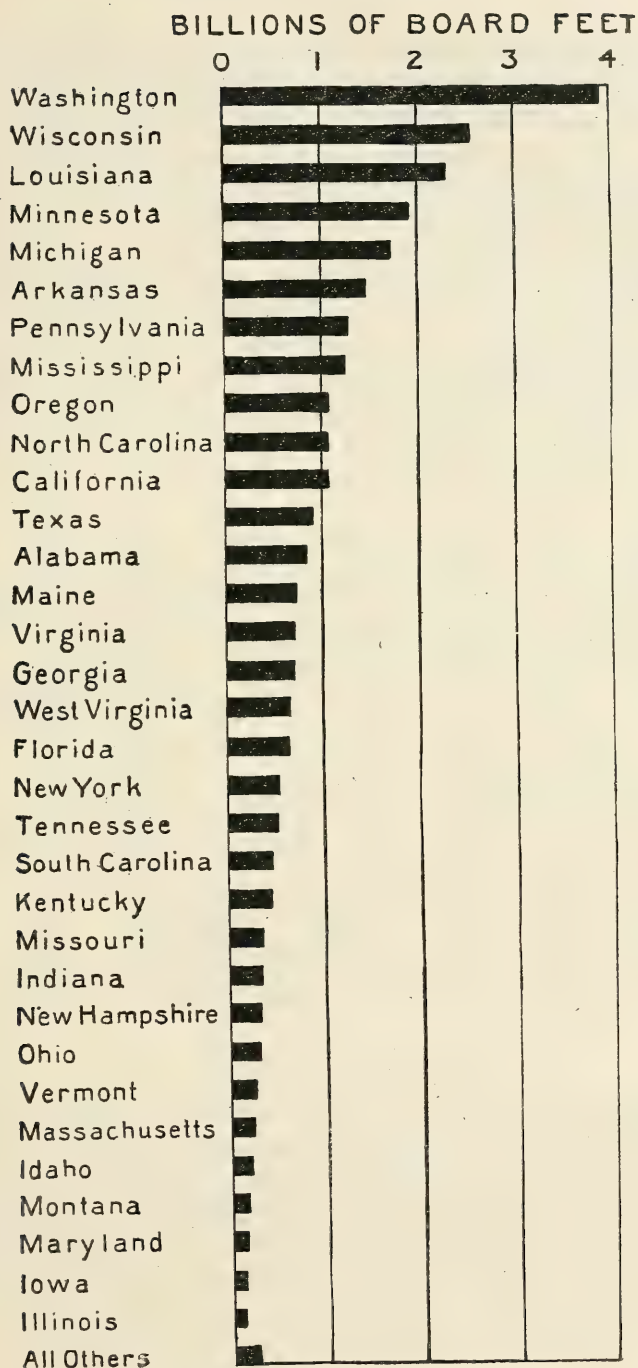


FIG 2.—Lumber production, by States, 1905

It is interesting to note that the five leading States in the production of lumber in 1899 were Wisconsin, with 10 per cent. of the total; Michigan, with 9.6 per cent.; Minnesota, with 7.7 per cent.; Pennsylvania, with 6.3 per cent.; and Washington, with 5.3 per cent. During the past five years Washington has advanced from fifth to first place, a position it will assuredly hold for a long time.

Figure 3 gives in order of rank the eight States which have led in lumber production since 1850. From this it is seen New York occupied first place in 1850, Pennsylvania in 1860, Michigan in 1870, 1880 and 1890, Wisconsin in 1900 and 1904, and Washington in 1905. This chart is based upon Census reports, except for 1905, for which Forest Service figures are used. Previous to 1900, data are lacking concerning the quantity of lumber cut in the various States, and the rank is based on value, while for 1900, 1904 and 1905 it is based on the total cut.

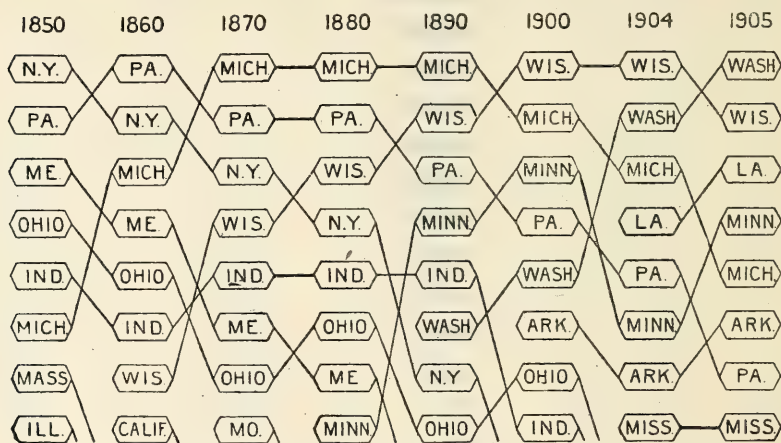


FIG. 3.—Relative rank of the eight States leading in the production of lumber since 1850.

PRODUCTION BY SPECIES.

Tables 4 to 28 give the quantity of each kind of lumber cut in the various States in the order of relative importance, as indicated by the reports to the Forest Service. It should be borne in mind that the total number of mills given in these tables far exceeds the total given in Table 29. If, for instance, a mill cuts oak, ash, hickory, and gum it appears in the tables for each of these species.

YELLOW PINE.

The term "yellow pine" covers all of the pine in the eastern half of the United States except white and Norway pine. The principal species included are, in order of importance, longleaf, shortleaf, loblolly, and pitch pine.

In 1905, 3,162 mills, as shown by Table 4, reported a cut of 8,771,966,000 feet of yellow pine. It will be seen from the table that Louisiana leads, with 1,737,960,000 feet, or 19.8 per cent. of the total. Then comes Arkansas, with 1,024,011,000 feet, or 11.7 per cent.; Mississippi, with 1,017,191,000 feet, or 11.6 per cent.; Texas, with 910,465,000 feet, or 10.4 per cent.; North Carolina, with 837,366,000 feet, or 9.5 per cent.; Alabama, with 744,192,000 feet, or 8.5 per cent.; Georgia, with 663,831,000 feet, or 7.6 per cent.; Florida, with 601,374,000 feet, or 6.9 per cent.; Virginia, with 496,895,000 feet, or 5.7 per cent.; and South Carolina, with 406,502,000 feet, or 4.6 per cent. These ten States produced over 96 per cent. of the total amount of yellow pine reported. A relatively small amount was cut in Missouri and Maryland, and a little was reported from sixteen other States.

The annual cut of yellow pine has probably not yet reached its maximum, and this timber will undoubtedly hold first rank in the point of output for several years.

TABLE 4.—*Cut of yellow pine in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Louisiana.....	168	1,737,960	19.8	Virginia.....	340	496,895	5.7
Arkansas.....	235	1,024,011	11.7	South Carolina.....	191	406,502	4.6
Mississippi.....	241	1,017,191	11.6	Missouri.....	63	161,128	1.8
Texas.....	153	910,465	10.4	Maryland.....	77	85,023	.9
North Carolina.....	551	837,366	9.5	All others.....	410	86,028	1.0
Alabama.....	290	744,192	8.5				
Georgia.....	326	663,831	7.6	Total.....	3,162	8,771,966	100.0
Florida.....	117	601,374	6.9				

WHITE PINE.

The cut of white pine by States is given in Table 5. White pine in greater or less quantity was reported from twenty-four States. Norway or red pine is included with white pine, since the two species are cut and sold together under the name of "northern pine" in the Lake States, and it is impossible to determine exactly the proportion of Norway. It is safe to say, however, that at present at least 30 per cent. of the pine cut in Michigan, Wisconsin, and Minnesota is Norway pine, or over 1,000,000,000 feet annually.

TABLE 5.—*Cut of white pine in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.	State.	Num- ber of mills.	M feet.	Per cent.
Minnesota.....	128	1,847,072	37.9	Pennsylvania.....	366	87,097	1.8
Wisconsin.....	289	1,467,078	30.1	Illinois.....	4	32,794	.7
Michigan.....	252	463,308	9.5	West Virginia.....	46	31,450	.7
New Hampshire.....	248	211,586	4.3	North Carolina.....	77	28,438	.6
Maine.....	299	201,867	4.1	Virginia.....	51	22,200	.5
Massachusetts.....	226	176,340	3.6	All others.....	256	65,878	1.4
Iowa.....	7	122,757	2.5				
New York.....	728	110,155	2.3	Total.....	2,977	4,868,020	100.0

The table shows that 2,977 firms reported a cut of 4,868,020,000 feet of white and Norway pine. Minnesota is the leading State, with 1,847,072,000 feet, or 37.9 per cent. of the total. Wisconsin comes second with 1,467,078,000 feet, or 30.1 per cent. Michigan stands third, with 463,308,000 feet, or 9.5 per cent. Then follow New Hampshire, Maine, Massachusetts, and other States. It will be noted that Iowa is credited with 122,757,000 feet and Illinois with 32,794,000 feet. This lumber was cut in mills along the Mississippi from Minnesota logs, and if Minnesota is credited with this timber, the output of white and Norway pine in the Lake States was over 80 per cent. of the entire cut of these species. The Census figures upon the cut of white and Norway pine in these three States in 1899 were: Wisconsin, 2,412,688,000 feet; Minnesota, 2,253,391,000 feet; and Michigan, 1,274,923,000 feet—a total of 5,941,002,000 feet, against 3,777,458,000 feet in 1905. The falling off has been greatest in Michigan, but the turning point has been passed even in Minnesota, and a decreasing output of pine can be looked for from the Lake States from year to year.

DOUGLAS FIR.

Douglas fir now ranks third in importance as a lumber producer in the United States, and it will hold second place within a short time. It is unfortunate that this species has so many names. "Red fir," "Douglas spruce," "yellow fir," and "Oregon pine" are other terms given it, and confusion is constantly arising in consequence. All are more or less justified by the circumstances that, botanically, the tree is neither a fir, a spruce, nor a pine. The cut for 1905, 4,319,479,000 feet, is given in Table 6. Of this amount, 427 mills in Washington cut 3,125,325,000 feet, or 72.4 per cent., and 281 mills in Oregon cut 1,076,695,000 feet, or 24.9 per cent. California reported 100,816,000 feet, and 16,643,000 feet was reported from five other western States.

There is a large amount of Douglas fir stumpage in Washington and Oregon, and the cut of this species will largely increase in the near future. In fact, the output of Douglas fir promises before many years to equal that of southern yellow pine and eventually to surpass it as the stumpage of the latter is reduced.

TABLE 6.—*Cut of Douglas fir in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.
Washington.....	427	3,125,325	72.4
Oregon.....	281	1,076,695	24.9
California.....	64	100,816	2.3
All others.....	24	16,643	.4
Total.....	796	4,319,479	100.0

HEMLOCK.

The amount of hemlock cut last year by 3,023 mills was 2,804,-083,000 feet, practically one-third of the total output, followed by Wisconsin, with 610,225,000 feet, or 21.8 per cent.; and Michigan, with 569,810,000 feet, or 20.3 per cent.; the three States producing three-fourths of the total quantity reported. Only a relatively small proportion was cut in any other State, but the production was widely scattered, as may be seen from the fact that returns were received from twenty-six States.

TABLE 7.—*Cut of hemlock in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.	State.	Num- ber of mills.	M feet.	Per cent.
Pennsylvania.....	415	920,854	32.8	Maine.....	257	86,753	3.1
Wisconsin.....	241	610,225	21.8	Washington.....	42	84,773	3.0
Michigan.....	299	569,810	20.3	All others.....	763	182,474	6.5
New York.....	1,006	179,550	6.4				
West Virginia.....	111	169,644	6.1	Total.....	3,023	2,804,083	100.0

It is of particular interest to note that 84,773,000 feet of hemlock was reported from the State of Washington. This is the western species, the lumber of which is freer from defects and of higher quality than that of the eastern species. So great has been the prejudice against the name "hemlock" in the West, however, that until very recently hemlock lumber has been mixed in with other lumber or sold under names which disguised its identity. The actual cut of western hemlock in 1905 was undoubtedly greater than the amount reported. The Census gave a cut of only 204,000 feet of this species for Washington in 1899, which indicates the difficulty of securing accurate figures upon it.

SPRUCE.

No attempt was made to distinguish the different kinds of spruce in the reports, but it will be understood, of course, that the spruce of Washington is different from that of Maine, and that altogether several species are cut for lumber. It is probable that a small amount of Douglas fir was reported as spruce by western operators.

TABLE 8.—*Cut of spruce in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.	State.	Num- ber of mills.	M feet.	Per cent.
Maine.....	238	358,758	30.7	Oregon.....	23	57,208	4.9
New York.....	329	211,076	18.1	Massachusetts.....	39	31,980	2.8
Washington.....	70	179,864	15.4	All others.....	244	48,622	4.2
Vermont.....	244	111,650	9.6				
West Virginia.....	35	107,072	9.2	Total.....	1,333	1,165,940	100.0
New Hampshire.....	111	59,710	5.1				

In 1905, 1,133 mills cut 1,165,940,000 feet of spruce, as shown by Table 8. Maine is far in the lead, as it has been for many years. The quantity reported from Maine for 1905 was 358,758,000 feet, or 30.7 per cent. of the total. New York comes next with 211,076,000 feet, or 18.1 per cent., followed by Washington with 179,864,000 feet, or 15.4 per cent.; Vermont with 111,650,000 feet, or 9.6 per cent.; West Virginia with 107,072,000 feet, or 9.2 per cent., and New Hampshire with 59,710,000 feet, or 5.1 per cent. Oregon reported 4.9 per cent. of the total, Massachusetts 2.8 per cent., and all other States combined 4.2 per cent. Altogether the cutting of spruce was reported from twenty-four different States.

WESTERN YELLOW PINE.

This is another species, concerning the trade name of which unfortunate difficulties have arisen. Botanically it is *Pinus ponderosa*, and is classed with the pitch or yellow pines. The wood, however, is less resinous and lighter than that of the southern yellow pines, and many manufacturers insist, with considerable reason, that it is so nearly like white pine that the word "white" should appear in the name. It is sold principally under the names of western pine, western white pine and California white pine. The cut reported for 1905 is 988,542,000 feet, given in Table 9. California leads with 363,932,000 feet, or 36.8 per cent.; Washington is second with 217,074,000 feet, or 22 per cent., and Montana third, with 101,998,000 feet, or 10.3 per cent. Then follow Oregon with 8.6 per cent. of the total, Idaho with 8.4 per cent., and Colorado with 4.9 per cent. Six other States cut 9 per cent. of the total.

TABLE 9.—*Cut of western yellow pine in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.	State.	Num- ber of mills.	M feet.	Per cent.
California.....	110	363,932	36.8	Colorado.....	37	48,223	4.9
Washington.....	109	217,074	22.0	All others.....	60	88,720	9.0
Montana.....	19	101,998	10.3				
Oregon.....	44	84,955	8.6	Total.....	425	988,542	100.0
Idaho.....	46	83,640	8.4				

CYPRESS.

The cut of cypress by 468 mills in 1905 was 753,369,000 feet. Louisiana, as shown by Table 10, is by far the largest producer, with a cut of 487,504,000 feet, or 64.7 per cent. of the total. Relatively small amounts were cut in fourteen other States. Arkansas reported 8 per cent. of the total, Florida 7.4 per cent., Mississippi 7.2 per cent., South Carolina 3.5 per cent., North Carolina 2.7 per cent., and the remaining States combined 6.5 per cent.

TABLE 10.—*Cut of cypress in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.	State.	Num- ber of mills.	M feet.	Per cent.
Louisiana.....	73	487,504	64.7	North Carolina.....	52	20,423	2.7
Arkansas.....	98	60,252	8.0	All others.....	134	49,194	6.5
Florida.....	17	55,569	7.4				
Mississippi.....	74	54,211	7.2	Total.....	468	753,369	100.0
South Carolina.....	20	26,216	3.5				

The output of cypress has apparently not yet reached its maximum, as the Forest Service figures for 1905 are slightly greater than the Census figures for 1904, and over 50 per cent. larger than those of the Census for 1899.

REDWOOD.

The cut of redwood, 411,689,000 feet, reported by 55 mills, is given in Table 11. The area of production of this wood is very limited, but there is yet a comparatively large amount of stumpage and it is probable that the annual output will not fall below the present quantity for some time.

TABLE 11.—*Cut of redwood in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.
California.....	55	411,689	100.0

CEDAR.

Like spruce, "cedar" covers several species, the wood of which has similar properties. Cedar is used principally for poles, piles, posts, and shingles, and it is only in the State of Washington that any considerable quantity of it is cut into lumber. The amount of cedar lumber reported is given in Table 12. Of the total of 363,900,000 feet, Washington produced 69.3 per cent., Maine 8.6 per cent., Oregon 7 per cent., Idaho 4.3 per cent., Michigan 3.4 per cent., Wisconsin 3.2 per cent., and twelve other States combined 4.2 per cent.

TABLE 12.—*Cut of cedar in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Washington.....	140	252,174	69.3	Wisconsin.....	18	11,591	3.2
Maine.....	52	31,267	8.6	All others.....	121	15,298	4.2
Oregon.....	65	25,428	7.0	Total.....	433	363,900	100.0
Idaho.....	8	15,560	4.3				
Michigan.....	29	12,582	3.4				

SUGAR PINE.

The cut of sugar pine by 63 mills in 1905 is given in Table 13. The range of merchantable sugar pine is practically restricted to the west side of the Sierra Nevadas and portions of the Coast range, and 97.6 per cent of the cut of 123,085,000 feet reported was in California. The cut of sugar pine in 1899, according to the Census, was only 53,558,000 feet, which indicates the rapid increase in output the last few years.

TABLE 13.—*Cut of sugar pine in 1905.*

State.	Number of mills.	M feet.	Per cent.
California.....	53	120,002	97.6
Oregon.....	10	3,083	2.4
Total.....	63	123,085	100.0

WESTERN WHITE PINE.

Western white pine is a true white pine, and very closely resembles the eastern white pine, both in the appearance of the tree and the properties of the wood. It is cut principally in a rather small territory covering portions of Montana, Idaho, and eastern Washington. So far as could be determined from the reports, the cut by

39 mills in these three States in 1905 was 115,678,000 feet, as shown in Table 14. It is quite certain, however, that the figures, particularly those for Washington, include considerable western yellow pine, which is frequently marketed under the name of white pine.

TABLE 14.—*Cut of western white pine in 1905.*

State.	Number of mills.	M feet.	Per cent.
Idaho.....	14	62,453	54.0
Washington.....	20	32,664	28.2
Montana.....	5	20,561	17.8
Total.....	39	115,678	100.0

OAK.

The cut of white and red oak reported for 1905 is given in Tables 15 and 16. No further separation into the various kinds of oak was practicable. Without question, a number of species were included under each head by the manufacturers, and quite probably in making out their reports they did not, in many cases, distinguish carefully between the white and red oaks. The oaks are among the most widely distributed hardwoods, and reports of oak lumber were received from thirty-five States. The total amount of white oak reported was 1,210,216,000 feet, of which West Virginia produced 12.9 per cent.; Kentucky, 12.7 per cent.; Ohio, 11.4 per cent.; Tennessee, 10.6 per cent., and Indiana, 10 per cent. The total amount of red oak reported was 623,553,000 feet, of which Tennessee cut 12.8 per cent., Arkansas, 10.8 per cent.; Kentucky, 9.3 per cent., and Indiana, 8.8 per cent.

While the Forest Service figures upon the output of oak in 1905 are incomplete, there is no doubt that the cut is decreasing because of the diminished supply of stumpage. The Census reports show a decrease of about 945,000,000 feet between 1899 and 1904.

TABLE 15.—*Cut of white oak in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
West Virginia.....	252	156,099	12.9	Mississippi.....	137	58,899	4.9
Kentucky.....	380	153,682	12.7	North Carolina.....	333	40,622	3.4
Ohio.....	467	137,268	11.4	Missouri.....	141	30,888	2.6
Tennessee.....	412	127,599	10.6	Alabama.....	90	20,302	1.7
Indiana.....	380	121,091	10.0	All others.....	1,142	106,744	8.5
Arkansas.....	270	100,502	8.3				
Pennsylvania.....	469	92,998	7.7	Total.....	4,726	1,210,216	100.0
Virginia.....	253	63,432	5.3				

TABLE 16.—*Cut of red oak in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Tennessee.....	367	79,793	12.8	Ohio.....	385	24,575	4.0
Arkansas.....	214	67,514	10.8	Virginia.....	167	23,298	3.8
Kentucky.....	277	58,056	9.3	Illinois.....	145	23,072	3.7
Indiana.....	375	54,725	8.8	Wisconsin.....	201	20,097	3.2
Mississippi.....	112	41,453	6.6	All others.....	1,207	123,128	19.8
North Carolina.....	261	41,411	6.6	Total.....	4,263	623,553	100.0
Pennsylvania.....	403	40,054	6.4				
West Virginia.....	149	26,378	4.2				

MAPLE.

The cut of maple reported by 2,765 mills in 1905 was 608,746,000 feet, as shown in Table 17. Michigan is by far the greatest producer of maple lumber, reporting 357,611,000 feet, or 58.8 per cent. of the total. Vermont cut 53,745,000 feet, or 8.9 per cent; Pennsylvania 48,883,000 feet, or 8 per cent.; New York 44,550,000 feet, or 7.3 per cent.; Wisconsin 40,425,000 feet, or 6.6 per cent.; Indiana 15,828,000 feet, or 2.6 per cent., and twenty other States combined, 47,704,000 feet, or 7.8 per cent. There has apparently been little change in the total output of maple for several years.

TABLE 17.—*Cut of maple in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Michigan.....	311	357,611	58.8	Indiana.....	298	15,828	2.6
Vermont.....	182	53,745	8.9	All others.....	1,002	47,704	7.8
Pennsylvania.....	326	48,883	8.0	Total.....	2,765	608,746	100.0
New York.....	421	44,550	7.3				
Wisconsin.....	225	40,425	6.6				

YELLOW POPLAR.

Table 18 shows the cut of yellow poplar reported by 2,115 manufacturers. This was 582,748,000 feet. Kentucky is the leading State, with 21 per cent. of the total, followed by West Virginia, with 19.2 per cent.; Tennessee, with 19 per cent.; Ohio, with 9.5 per cent.; North Carolina, with 8.3 per cent.; Virginia, with 7.1 per cent.; Alabama, with 6.5 per cent., and small amounts in nine other States. The Forest Service figures upon yellow poplar are incomplete, but probably the cut of this species is still decreasing. The Census figures show a heavy decrease between 1899 and 1904.

TABLE 18.—*Cut of yellow poplar in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Kentucky.....	309	122,485	21.0	Indiana.....	251	18,143	3.1
West Virginia.....	197	112,230	19.2	Mississippi.....	63	14,165	2.4
Tennessee.....	361	110,480	19.0	Georgia.....	78	11,128	1.9
Ohio.....	203	55,140	9.5	All others.....	148	11,753	2.0
North Carolina.....	274	48,122	8.3	Total.....	2,115	582,748	100.0
Virginia.....	156	41,294	7.1				
Alabama.....	75	37,808	6.5				

RED GUM.

In 1905, 898 mills cut 316,588,000 feet of red gum. The leading State, as shown by Table 19, is Arkansas, which cut 91,942,000 feet, or 29 per cent. of the total. Missouri comes second, with 71,948,000 feet, or 22.7 per cent.; and Mississippi third, with 47,320,000 feet, or 15 per cent. Then follow Tennessee with 11.7 per cent., Kentucky with 6.2 per cent., Indiana with 4.1 per cent., and Illinois with 3.2 per cent. Eleven other States combined cut 8.1 per cent. The cut of red gum has increased to some extent in the last few years, the Census figures on gum of all kinds in 1899 being 268,251,000 feet.

TABLE 19.—*Cut of red gum in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Arkansas.....	148	91,942	29.0	Indiana.....	94	12,858	4.1
Missouri.....	60	71,948	22.7	Illinois.....	51	10,072	3.2
Mississippi.....	95	47,320	15.0	All others.....	217	25,543	8.1
Tennessee.....	135	37,147	11.7	Total.....	921	316,588	100.0
Kentucky.....	121	19,758	6.2				

BASSWOOD.

In 1905, 258,390,000 feet of basswood was cut by 2,212 mills, as given in Table 20. Wisconsin produced nearly one-half the total, or 47.1 per cent. Michigan ranks second, with 18.1 per cent., followed by New York with 9.6 per cent., Pennsylvania with 4.9 per cent., and West Virginia with 4 per cent. Fifteen other States combined cut 16.3 per cent. The cut of basswood given by the Census of 1899 was 280,025,000 feet, but there has been some decrease since that time.

TABLE 20.—*Cut of basswood in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.	State.	Num- ber of mills.	M feet.	Per cent.
Wisconsin.....	300	121,857	47.1	West Virginia.....	94	10,251	4.0
Michigan.....	280	46,759	18.1	All others.....	957	42,243	16.3
New York.....	375	24,760	9.6	Total.....	2,212	258,390	100.0
Pennsylvania.....	206	12,520	4.9				

BIRCH.

In 1905, 1,327 mills cut 240,704,000 feet of birch. The figures for the leading States are given in Table 21. By far the largest amount was cut in Wisconsin, which reported 95,191,000 feet, or 39.5 per cent. of the total. Michigan cut 39,693,000 feet, or 16.5 per cent.; New York, 24,760,000 feet, or 10.3 per cent.; Pennsylvania, 23,852,000 feet, or 9.9 per cent.; Vermont, 21,750,000 feet, or 9.0 per cent.; Maine, 20,164,000 feet, or 8.4 per cent.; and nine other States, combined, 15,294,000 feet, or 6.4 per cent. of the total. There has been a relatively large increase in the cut of birch since 1899, for which year the Census reported 128,410,000 feet.

TABLE 21.—*Cut of birch in 1905.*

State.	Num- ber of mills.	M feet.	Per cent.	State.	Num- ber of mills.	M feet.	Per cent.
Wisconsin.....	223	95,191	39.5	Maine.....	122	20,164	8.4
Michigan.....	191	39,693	16.5	All others.....	239	15,294	6.4
New York.....	225	24,760	10.3	Total.....	1,327	240,704	100.0
Pennsylvania.....	142	23,852	9.9				
Vermont.....	185	21,750	9.0				

COTTONWOOD.

The cut of cottonwood reported for 1905 by 422 mills was 236,000,000 feet. The leading State, as shown by Table 22, was Arkansas, with 90,920,000 feet, or 38.5 per cent of the total. Next in order came Mississippi, with 43,462,000 feet, or 18.4 per cent.; Louisiana, with 38,693,000, or 16.4 per cent.; Tennessee, with 28,683,000, or 12.2 per cent.; and small amounts in twenty-three other States, aggregating 34,242,000 feet, or 14.5 per cent. of the total. The cut of cottonwood in 1899, according to Census figures, was 401,437,000 feet, so it is probable that the cut in 1905 was considerably larger than is indicated by the reports to the Forest Service, though not equal to that of 1899.

TABLE 22.—*Cut of cottonwood in 1905.*

State.	Number of mills.	M feet.	Per cent.
Arkansas.....	66	90,920	38.5
Mississippi.....	30	43,462	18.4
Louisiana.....	15	38,693	16.4
Tennessee.....	16	28,683	12.2
All others.....	295	34,242	14.5
Total.....	422	236,000	100.0

ELM.

The cut of elm reported for 1905 was 227,038,000 feet, as shown by Table 23. Of this amount, Wisconsin cut 31 per cent.; Michigan, 25.2 per cent.; Indiana, 11 per cent.; Ohio, 9.9 per cent.; Arkansas, 4.1 per cent.; Missouri, 3.7 per cent.; and twenty-six other States, combined, 15.1 per cent. The cut of elm given by the Census for 1899 was 388,095,000 feet. There has been a falling off in the output since that time, but the cut in 1905 was probably somewhat larger than is indicated from the reports to the Forest Service.

TABLE 23.—*Cut of elm in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Wisconsin.....	254	70,327	31.0	Missouri.....	72	8,425	3.7
Michigan.....	254	57,305	25.2	All others.....	688	34,285	15.1
Indiana.....	299	24,911	11.0				
Ohio.....	316	22,464	9.9	Total.....	1,937	227,038	100.0
Arkansas.....	54	9,321	4.1				

CHESTNUT.

The cut of chestnut by 1,599 mills in 1905 was 224,413,000 feet. The figures for the leading States are given in Table 24. Pennsylvania heads the list, with 41,018,000 feet, or 18.3 per cent. of the total; Tennessee comes next, with 28,010,000 feet, or 12.5 per cent.; and then follow North Carolina, Connecticut and West Virginia, with over 25,000,000 feet each and approximately equal amounts. Kentucky reported 6.7 per cent. of the total; Virginia, 6.2 per cent.; Maryland, 5 per cent.; Massachusetts, 4.6 per cent., and thirteen other States combined, 12.6 per cent. The cut of chestnut in 1904 was 243,537,000 feet, according to the Census.

TABLE 24.—*Cut of chestnut in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Pennsylvania.....	397	41,018	18.3	Virginia.....	84	13,994	6.2
Tennessee.....	171	28,010	12.5	Maryland.....	31	11,228	5.0
North Carolina.....	117	25,628	11.4	Massachusetts.....	117	10,388	4.6
Connecticut.....	73	25,562	11.4	All others.....	321	28,312	12.6
West Virginia.....	141	25,256	11.3				
Kentucky.....	147	15,017	6.7	Total.....	1,599	224,413	100.0

BEECH.

The cut of beech reported for 1905 is given in Table 25. The output of 1,853 mills was 219,000,000 feet. Michigan is the leading State, with 59,896,000 feet, or 27.3 per cent. of the total. Pennsylvania comes next, with 53,494,000 feet, or 24.7 per cent.; and then Indiana, with 30,827,000 feet, or 14 per cent. Beech was reported from seventeen other States, but only relatively small amounts were cut outside of Michigan, Pennsylvania and Indiana, which furnished 66 per cent. of the total quantity reported. The Census gave no figures upon beech in 1899, so there is no basis for comparison.

TABLE 25.—*Cut of beech in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Michigan.....	192	59,896	27.3	Vermont.....	123	7,829	3.6
Pennsylvania.....	238	53,494	24.7	Kentucky.....	129	7,787	3.5
Indiana.....	285	30,827	14.0	All others.....	342	20,110	9.1
New York.....	275	24,760	11.3				
Ohio.....	269	14,297	6.5	Total.....	1,853	219,000	100.0

ASH.

In 1905, 159,634,000 feet of ash was cut by 2,653 mills. As shown by Table 26, Michigan was the leading State, with 26,141,000 feet, or 16.5 per cent. of the total. Next comes Wisconsin, with 14,588,000 feet, or 9.2 per cent., and then Indiana, Arkansas and Kentucky, with approximately 13,000,000 feet, or over 8 per cent. each. Relatively small amounts were reported from twenty-nine other States, but over half of the output came from the five States mentioned. The cut of ash in 1899, according to the Census, was 256,431,000 feet, but the output is decreasing, because of the scarcity of stumpage.

TABLE 26.—*Cut of ash in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Michigan.....	253	26,141	16.5	South Carolina.....	12	7,460	4.7
Wisconsin.....	203	14,588	9.2	Pennsylvania.....	237	6,691	4.2
Indiana.....	279	13,340	8.4	Tennessee.....	154	5,819	3.6
Arkansas.....	88	13,034	8.2	All others.....	922	41,000	25.9
Kentucky.....	157	12,939	8.1				
Ohio.....	280	10,539	6.1	Total.....	2,653	159,634	100.0
Mississippi.....	68	8,083	5.1				

HICKORY.

The cut of hickory reported for 1905 by 1,829 mills was 95,803,000 feet. The figures for the principal States are given in Table 27. Indiana leads, with 15,138,000 feet, or 15.8 per cent.; followed by Arkansas, with 13,262,000 feet, or 13.8 per cent.; Kentucky, with 12,894,000 feet, or 13.4 per cent.; Tennessee, with 11,958,000 feet, or 12.5 per cent., and Ohio, with 11,054,000 feet, or 11.5 per cent. Mississippi reported 6.5 per cent. of the total, Illinois 5.6 per cent., Pennsylvania 5.4 per cent., Missouri 3.6 per cent., West Virginia 2.4 per cent. Twenty other States combined reported 9.5 per cent. The total cut of hickory in 1905 reported to the Forest Service is practically the same as that given by the Census for 1899, but there is no doubt that these figures are considerably below the actual annual consumption of hickory. A considerable amount of hickory, particularly spoke material, is sold by the piece, and consequently was not reported as lumber. The members of the National Hickory Association estimate their annual requirements as equivalent to 250,000,000 board feet.

TABLE 27.—*Cut of hickory in 1905.*

State.	Number of mills.	M feet.	Per cent.	State.	Number of mills.	M feet.	Per cent.
Indiana.....	319	15,138	15.8	Pennsylvania.....	188	5,146	5.4
Arkansas.....	81	13,262	13.8	Missouri.....	68	3,430	3.6
Kentucky.....	148	12,894	13.4	West Virginia.....	74	2,310	2.4
Tennessee.....	148	11,958	12.5	All others.....	308	9,064	9.5
Ohio.....	352	11,054	11.5				
Mississippi.....	40	6,239	6.5	Total.....	1,829	95,803	100.0
Illinois.....	103	5,308	5.6				

OTHER KINDS.

Several kinds of lumber which are cut only in relatively small amounts, and the States in which they are chiefly produced, are given in Table 28. These are: Larch, 76,173,000 feet; tamarack, 64,463,000 feet; white fir, 52,725,000 feet; tupelo, 35,794,000 feet; balsam, 35,506,000 feet; and walnut, 29,851,000 feet. While these woods are of minor importance, their output, with the exception of walnut, has increased strongly since 1899. The cut of larch and tamarack combined for that year is given by the Census as only 49,802,000 feet, while no figures at all are given for balsam and tupelo.

TABLE 28.—*Cut of minor species in 1905.*

Kind.	M feet.	States mostly cut in.
Larch.....	76,173	Montana, Washington, Idaho, Oregon.
Tamarack.....	64,463	Wisconsin, Michigan, Minnesota.
White fir.....	52,725	California, Washington, Oregon.
Tupelo.....	35,794	Virginia, Louisiana, Alabama, North Carolina, etc.
Balsam.....	35,506	Maine, Vermont, New York, etc.
Walnut.....	29,851	Indiana, Ohio, Illinois, Missouri, Kentucky, Tennessee, etc.

PRODUCTION BY STATES.

The production of lumber in 1905 by 11,666 mills is given by States and species in Table 29. The following States led in the production of the kinds of timber specified:

Arkansas: Red gum and cottonwood.

California: Western yellow pine and redwood.

Idaho: Western white pine.

Indiana: Hickory and walnut.

Kentucky: Yellow poplar.

Louisiana: Yellow pine and cypress.

Maine: Spruce and balsam.

Michigan: Maple, beech and ash.

Minnesota: White pine.

Montana: Larch.

Pennsylvania: Hemlock and chestnut.

Tennessee: Red oak.

Washington: Douglas fir and cedar.

West Virginia: White oak.

Wisconsin: Basswood, birch, elm and tamarack.

SHINGLES.

The cut of shingles in 1905 by 2,547 mills is given in Table 30. The total number reported was 15,340,909,000, of which western cedar furnished 9,595,245,000, or 62.5 per cent; cypress 1,514,478,000, or 9.9 per cent.; eastern cedar 1,313,297,000, or 8.6 per cent.; Douglas fir 911,173,000, or 5.9 per cent. The cut of redwood shingles reported was 483,887,000, or 3.1 per cent. of the total; of yellow pine 459,472,000, or 3 per cent.; of white and Norway pine 382,742,000, or 2.5 per cent.; and of hemlock 135,020,000, or 0.9 per cent. The shingles cut of other species than those mentioned amounted to 3.6 per cent. of the total.

The total number of shingles cut in 1899, according to the Census, was 11,947,620,000. Most of the increase in cut in 1905 consists of western red cedar.

TABLE 30.—*Cut of shingles in 1905.*

Kind.	Number of thousands.	Per cent.	State.	Number of mills.	Number of thousands.	Per cent.
Western cedar.....	9,595,245	62.5	Washington.....	515	10,509,914	68.6
Cypress.....	1,514,478	9.9	Michigan.....	153	875,051	5.7
Eastern cedar.....	1,313,297	8.6	Louisiana.....	62	743,398	4.8
Douglas fir.....	911,173	5.9	California.....	71	547,863	3.6
Redwood.....	483,887	3.1	Wisconsin.....	112	417,046	2.7
Yellow pine.....	459,472	3.0	Maine.....	214	312,497	2.0
White and Norway pine.....	382,742	2.5	Arkansas.....	47	302,135	2.0
Hemlock.....	135,020	.9	Alabama.....	50	285,080	1.8
All others.....	545,595	3.6	Minnesota.....	68	193,738	1.3
			Georgia.....	112	177,986	1.2
			Florida.....	40	154,524	1.0
			All others.....	1,043	821,677	5.3
Total.....	15,340,909	100.0	Total.....	2,547	15,340,909	100.0

Washington is far in the lead as a shingle-producing State, since it cut 68.6 per cent. of the total number reported. This is because most of both the western and cedar and the Douglas fir shingles come from this State. Michigan comes next in order, with 5.7 per cent., consisting mostly of cedar; then Louisiana, with 4.8 per cent., made up principally of cypress. The California shingles are mostly redwood, those of Wisconsin and Maine cedar, those of Minnesota northern pine, and those of the Southern States yellow pine and cypress.

LATH.

The total cut of lath reported for 1905 by 1,801 mills was 3,111,157,000, as shown in Table 31. White and Norway pine lead with 872,599,000, or 28.1 per cent. of the total. Douglas fir ranks second, with 584,884,000, or 18.8 per cent.; hemlock third, with 430,014,000,

or 13.8 per cent.; and yellow pine fourth, with 407,742,000, or 13.1 per cent. Practically three-fourths of the lath were of these four species. Spruce is credited with 260,039,000, or 8.4 per cent. of the total; cypress with 155,825,000, or 5 per cent. Lath of other kinds and those which could not be determined are given under the head "Mixt," the number being 400,054,000, or 12.8 per cent. of the total. The Census reported a production of 2,501,314,000 lath of all kinds in 1899.

TABLE 31.—*Cut of lath in 1905.*

Kind.	Number of thousands.	Per cent.	State.	Number of mills.	Number of thousands.	Per cent.
White and Norway pine.	872,599	28.1	Washington.....	97	559,813	18.0
Douglas fir.....	584,884	18.8	Minnesota.....	80	422,025	13.3
Hemlock.....	430,014	13.8	Wisconsin.....	195	328,905	10.6
Yellow pine.....	407,742	13.1	Louisiana.....	56	259,259	8.3
Spruce.....	260,039	8.4	Maine.....	121	255,482	8.2
Cypress.....	155,825	5.0	Michigan.....	109	221,386	7.2
Mixt.....	400,054	12.8	Pennsylvania.....	211	219,143	7.0
			Oregon.....	34	116,456	3.8
			All others.....	898	728,688	23.6
Total.....	3,111,157	100.0	Total.....	1,801	3,111,157	100.0

The leading States in the production of lath are also given, in order, in Table 31, their relative importance being due to one or more of the species mentioned in the preceding paragraph. Washington comes first, with 18 per cent. of the total reported, followed by Minnesota, with 13.3 per cent., Wisconsin with 10.6 per cent., Louisiana with 8.3 per cent., Maine with 8.2 per cent., Michigan with 7.2 per cent., Pennsylvania with 7 per cent., and Oregon with 3.8 per cent. These eight States produced over three-fourths of the total number of lath reported.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 30, 1906.

Second Progress Report on the Strength of Structural Timber

BY W. KENDRICK HATT,
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INTRODUCTION.

The information contained in this circular was secured by systematic tests, carried on for four years, by the methods given in Circular 38, entitled "Instructions to Engineers of Timber Tests," and it supplements the results published in Circular 32 (Bureau of Forestry), "First Progress Report on the Strength of Structural Timber." Loblolly pine, longleaf pine, tamarack, and Norway pine, the principal structural timbers of the eastern United States, and Douglas fir and western hemlock of the Pacific coast were the woods tested.

The tests were made at the various testing laboratories of the Forest Service, located at Washington, D. C.; Charleston, S. C.; Purdue University, Lafayette, Ind.; the University of California, Berkeley, Cal.; the University of Oregon, Eugene, Ore.; the University of Washington, Seattle, Wash., and the Yale Forest School, New Haven, Conn.

There were two general classes of tests: (*a*) Tests on large beams, for studying the relations between strength, defects and degree of seasoning, and for determining moduli for design; (*b*) tests on small pieces cut from the uninjured parts of the tested beams. The latter, classed as minor tests, include bending, compression parallel to grain and at right angles to grain, and shearing. Minor tests are used to study the effects of moisture, rate of growth, and other factors. In such studies defects must, as far as possible, be eliminated.

Tests of class *a* were made upon large sticks, such as bridge stringers and other structural timbers having such knots, crooked grain, and other defects as are found in market material.

The attention of shippers is called to the weights of the different materials given in the tables. The weight of air-dry material, as found upon the market, varies considerably, but as a rule it will

exceed the oven-dry weight given in the tables by from 15 to 30 per cent., according to size and species. The oven-dry weight is obtained from the weight and from the volume of measurements of the timber at the time of test, in conjunction with subsequent moisture determinations. The shrinkage of the timber is not taken into account. This is variable and at present is not accurately known. It is estimated that air-dry timber has lost about 5 per cent. of its green volume.

The actual weight of the wood at the time it was tested may be computed from the oven-dry weight and moisture per cent. Thus, a dry weight of 29.4 pounds per cubic foot, at a moisture per cent. of 19.4, gives a weight of 35.1 pounds per cubic foot at the time of the test. The measurements of volume were, in most cases, those of surfaced lumber.

The origin of the sticks and their stage of seasoning are carefully described. Photographs were taken and drawings made locating knots and showing the amount of heart, sap, wane, etc. The sticks were graded by an experienced lumber inspector.

The tables give the average, maximum, and minimum values.

Results of tests on individual sticks will be published in connection with special reports.

SUMMARY.

A digest of the results of bending tests on large sticks given in the tables is shown in Table 1, which indicates the weight, strength, and stiffness of beams, such as are found on the market and used by engineers. More detailed information is given in the various other tables. The modulus of rupture represents fairly well the strength of the timber; the modulus of elasticity represents its stiffness. The strength of small, clear, green sticks cut from these beams is found in Table 11.

It should be noted that the strength values of wood usually quoted in handbooks are based on small, clear, well-seasoned sticks, the strength of which largely exceeds that of large structural timber.

TABLE 1.—*Summary of the average bending strength of structural timber.*

Reference No.	Species and locality of growth.	Grade.	Condition.	Number of tests.	Moisture per cent.	Weight per cubic foot.		Modulus of rupture.	Modulus of elasticity.
						As tested.	Oven dry.		
1	LOBLOLLY PINE.								
	South Carolina..	Square edge....	Green.....	42	48.0	Lbs. 46.2	Lbs. 31.2	Lbs. per sq. in. 5,580 ₇	$\frac{1,000 \text{ lbs. per sq. in.}}{1,426}$
2	LONGLEAF PINE.								
	South Carolina.. and Georgia.	Merchantable...	Partially air dry.	44	26.1	49.8	39.5	7,772 ₁₅	1,690
3	DOUGLAS FIR.								
	Oregon and Washington.	All grades.....	Partially air dry.	216	22.1	33.8	27.7	6,975 ₆₄	1,600
4	...do.....	Select and merchantable.	...do.....	164	22.0	33.9	27.7	7,500 ₄₈	1,636
5	Oregon.....	All grades.....	Green.....	135	30.9	38.4	29.4	6,140 ₂₆	1,526
6	...do.....	Select and merchantable.	...do.....	103	31.3	38.6	29.4	6,430 ₂₄	1,585
7	WESTERN HEM-LOCK.								
	Oregon and Washington.	All grades.....	Partially air dry.	64	27.8	33.2	26.0	5,992 ₁₂	1,351
8	Washington.....	...do.....	Green.....	30	36.2	38.8	28.5	5,783 ₁₆	1,475
9	TAMARACK.								
	Minnesota.....	Merchantable...	Green.....	30	50.6	45.2	30.1	4,562 ₄	1,219
10	NORWAY PINE.								
	Minnesota.....	Merchantable...	Green.....	49	47.8	37.4	25.4	3,975 ₇	1,189

NOTE.—Figures written as subscripts to the figures for modulus of rupture indicate the number of sticks failing in longitudinal shear.

The moisture condition of the beams varied somewhat between the different species given in Table 1. The moisture content of green timber also varies with the species—for instance, the maximum is about 37 per cent. of the dry weight in the case of Douglas fir heartwood and as high as 100 per cent. in the case of loblolly pine sapwood, so that the same moisture per cent. in these two woods does not represent an equal degree of seasoning. Again, Douglas fir seasons more rapidly in the dry climate of California than does loblolly pine in the moist climate of the Atlantic coast.

It is surprising how much moisture is found in well-seasoned timber. Sticks of longleaf pine 10 by 12 inches in cross section after drying in a lumber yard at Washington, D. C., for one year contained 35 per cent. of moisture, and sticks of loblolly pine from Virginia, 8 by 8 inches in cross section, after drying in the same

place for two years and becoming almost black on the surface, contained 34 per cent. of moisture.

In small sticks the strength begins to increase after the moisture has been reduced to about 26 per cent.* The laws expressing the relation of strength and moisture in the cases of small sticks do not, however, necessarily apply to large sticks. Timbers of commercial size develop checks and other defects while seasoning, and these partially offset the increase in strength due to drying. However, in the case of select sticks the actual strength was in some cases increased from 10 to 25 per cent. by one year of careful seasoning.

LOBLOLLY PINE.

Loblolly pine has not only a wide range of structural merit, but also a wide distribution. It occurs in a belt along the Atlantic coast and the Gulf of Mexico, from Virginia to eastern Texas, extending inland from 50 to 300 miles.

Under the name of Virginia pine the timber cut in the northern portion of this belt is generally found on the markets in small sticks, 8 by 8 inches or 10 by 10 inches in cross section, almost entirely sapwood and of so rapid a growth that sometimes only four rings occur in 3 inches. This is second-growth timber, usually very knotty and of an inferior grade. The same species is also marketed under the name of North Carolina pine, and in that case it is generally forest-grown timber of large size, with a large proportion of heartwood, fairly free from knots, and possessing a high order of structural value.

In the forest loblolly pine is prolific, grows vigorously, and holds its place in competition with other species. It is the principal tree in the operations of those lumber companies in the Southern States which look upon their forest holdings as part of their capital and reap successive crops from them by conservative forest management. It is therefore a timber which engineers and architects may expect to find on the market for an indefinite period. The chief objection to it is that being largely sapwood it decays rapidly when exposed. Because of its open grain, however, it is a wood which may be treated very successfully with preservatives.

Table 2, reference numbers 1-5, gives the results of bending tests on loblolly pine obtained from a mill at Charleston, S. C., and on the market at Washington, D. C.

The loblolly pine listed in the table, under reference numbers 1,

*See Bulletin No. 70 Forest Service, "Effect of Moisture on the Strength and Stiffness of Wood."

2 and 3, was "North Carolina pine," cut from the holdings of the E. P. Burton Lumber Co., near Charleston, S. C. It is a timber that generally shows sapwood on all four faces, and is on this account of a "standard" or "square edge" grade according to the Standard Inspection Rules (1902) of the Georgia Sawmill Association. These rules have been revised since this timber was graded, so as to allow more sap in the merchantable grade. A number of sticks classed as "square edge" in the table would now be graded as merchantable. The timber is good structural material, such as is used in warehouses, mills, and other structures in which the conditions do not demand longleaf pine.

Some of the bending tests (Table 2) were made with the load applied at the center of the span, and the remainder with the load applied at points one-third of the span from each end. The modulus of rupture of the green North Carolina pine beams (Table 2, reference number 1) is 5,580 pounds per square inch, and the modulus of elasticity 1,426,000 pounds per square inch. In the case of the partially air-dried beams containing from 25 to 30 per cent. of moisture (reference number 2) these values are 5,650 pounds per square inch, and 1,435,000 pounds per square inch, respectively. The oven-dry weight of the timber in both of these groups is 31.2 pounds per cubic foot. The moisture per cent. was 27.7 for the partially air-dried and 48 for the green material. Diagrams I and II show the distribution of moisture throughout the cross section of beams under different conditions of seasoning.

In the case of the partially air-dried beams containing less than 25 per cent. moisture (reference number 3), the modulus of rupture is 5,690 pounds per square inch, and the modulus of elasticity 1,340,000 pounds per square inch. The average moisture was 21 per cent., and the oven-dry weight 31.2 pounds per cubic foot. Reference numbers 1 to 3 show that the seasoning ordinarily undergone by large loblolly pine beams has little, if any, effect upon their strength.

The 8 by 8 inch partially air-dried Virginia pine (Table 2, reference number 4) was cut in Stafford County, Va., and had been drying in the yard for two years. This material has a modulus of rupture of 5,180 pounds per square inch, a modulus of elasticity of 1,180,000 pounds per square inch, at a moisture per cent. of 22.4, and an oven-dry weight of 28.8 pounds per cubic foot.

The 8 by 8 inch green Virginia pine (reference number 5), was cut about March, 1903, and was tested about one month after cutting. The timber was "sap stained," but it has been shown that

this staining, or "bluing," does not impair the strength of the wood. The modulus of rupture of these beams is 3,490 pounds per square inch, the modulus of elasticity 744,000 pounds per square inch, the oven-dry weight 26.9 pounds per cubic foot, and the weight as tested 43.7 pounds per cubic foot.

Table 11, reference number 1, shows a comparison of the strength values of small sticks and large parent beams of loblolly pine. The ratio of the strength values of the large beams to the small beams is 0.77 for the fiber stress at elastic limit, 0.71 for the modulus of rupture, and 0.99 for the modulus of elasticity. Table 12, reference numbers 1 and 2, gives the results of tests in compression parallel to grain. The crushing strength of North Carolina pine, partially air dry, and green, is 4,250 and 3,510 pounds per square inch, respectively. This is higher than the crushing strength of the Virginia pine, which is 2,950 pounds per square inch when partially air dry, and 2,140 pounds per square inch when green.

Table 13, reference number 1, gives the results of tests on loblolly pine in compression at right angles to grain. The average compressive strength at the elastic limit at right angles to grain is 469 pounds per square inch. The material was green, containing 57.1 per cent moisture.

Table 14, reference number 1, gives the results of shearing tests parallel to grain on small blocks. The shearing strength is 630 pounds per square inch, in material containing 83.2 per cent moisture.

MOISTURE DISTRIBUTION.

The moisture distribution in the cross section of North Carolina pine beams was determined by cutting sections 1 inch in thickness from near the center of the sticks and dividing the sections into nine parts in the directions shown in Diagrams I and II. The figures in the various parts of the sections show the percentage of moisture.

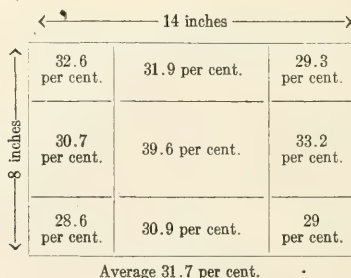


DIAGRAM I.—Distribution of moisture in cross section midway of the length of North Carolina loblolly pine beams. Average of 10 sections taken from sticks 8 by 14 inches by 10 feet. The timber was air dried from 2 to 5 months.

The distribution of moisture throughout the cross section was also determined on a set of disks cut from beams under three conditions of seasoning—green, air-dry, and kiln-dry. Diagram II shows the distribution in the three cases, sapwood being denoted by crosshatchings.

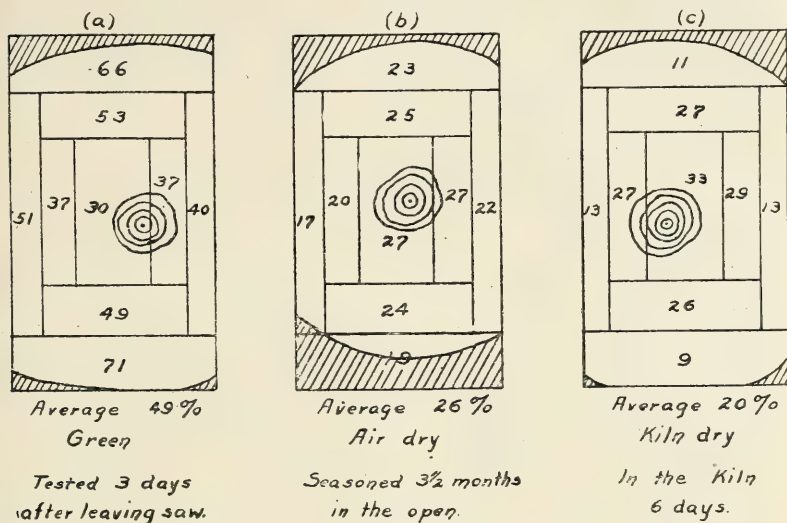


DIAGRAM II.—Distribution of moisture in cross section midway of the length of North Carolina pine beams.

(a) Average of 10 sections.

(b) Average of 4 sections.

(c) Average of 4 sections.

Sticks 8 by 16 inches in section.

In green timber that has been submerged in water for some time the moisture per cent near the surface is nearly twice that in the central part. In the air-dried sticks the drying did not penetrate to the central part at all. Section *c* was dried more quickly than the others, and the variation in the different parts is consequently greater. The sections used in both *b* and *c* were cut from sticks which were badly checked by too rapid seasoning. Along the beam variation in moisture was determined from sections cut from all beams at the quarter and center points, as shown in Tables 9 and 10. The moisture in the sections from the same beam varies so little that the longitudinal moisture distribution in 16-foot sticks may be taken as practically uniform, except at the ends and in cases where the percentage of sapwood varies greatly throughout the length of the beam.

In Table 3 the effect of seasoning on the strength of large beams

is well shown. Three sets of green North Carolina pine beams were dried in the open air in sunlight, in a kiln, and in a shed, respectively. The wood in the outer portion of the two sets of beams listed first was no doubt stronger than in the green condition. The beams failed in horizontal shear, however, before the added strength could be brought out, because of the presence of checks and shakes. A marked increase in strength was shown by the beams of select material that were carefully dried in a shed. The modulus of rupture of green material similar to that in Table 3 is 5,580 pounds per square inch. (Table 2, reference number 1.)

The actual shearing strength of loblolly pine, as determined by tests made on small blocks, is 630 pounds per square inch. (Table 14, reference number 1.) Out of 42 sticks, from 6 by 7 inches to 8 by 16 inches, tested on spans of from 10 to 16 feet (Table 8, reference number 1), 7 failed in horizontal shear at an average stress of 339 pounds per square inch. Since the actual shearing strength of the wood fiber was 630 pounds per square inch, and the longitudinal shearing stress in the beams at failure 339 pounds per square inch, this shows that only a little over half of the horizontal section of the beams was in a condition to resist shear. The fact that engineers should design beams with reference to the unit stresses deduced from tests of green timber and to horizontal shear was pointed out in Circular 32.

Two sections were cut from all sticks tested in bending, and their average moisture content was used as the moisture content of the beam. Tables 9 and 10 show a comparison of the moisture in sections cut from the same beam at the center and at one of the quarter points. Longleaf pine and loblolly pine are both included in Table 10.

In a stick in which the ratio of sap to heart varies throughout the length the distribution of moisture along the beam is likely to vary also. If the stick has been wet a short time before the determinations are made, it will be found that the sections containing the most sapwood will contain the greatest amounts of moisture, because the sapwood absorbs water much more readily than the heartwood. On the other hand, if the stick has been in the water long enough for both heartwood and sapwood to become saturated, and is then dried, the sections containing the most heartwood will have the highest percentage of moisture, because sapwood dries out more readily than heartwood. The sticks in Table 10 were partly green and partly air-dry. This accounts for the wide variation of moisture in the different sticks.

EFFECT OF KNOTS.

A series of tests was made to determine the weakening effect of knots. The timber used was North Carolina pine obtained from the E. P. Burton Lumber Company, Charleston, S. C. This was tested at the mill. The logs went to the saw directly from the millpond, and the sticks were tested within a few days after leaving the saw. The logs were sawed, in the presence of the testing engineer, so as to include knots of various positions, sizes, and conditions. Ninety-three such sticks, 5 by 12 inches in cross section, were then tested in bending on a 15-foot span. Thirty-four sticks were loaded at the center, and the remainder tested under "third-point" loading. Tables 4 and 5 give the results of these tests.

After a few trials a method of analysis was devised in which the area of the faces of the sticks (vertical in the tests) was divided to indicate part volumes of the stick as shown above the tables. Volume 1 is the middle half of the stick one-quarter of the height up from the bottom. A knot, wavy grain, or defect occurring in this volume throws the stick into group 1. Volume 2 is the middle half of the stick one-quarter of the height down from the top. Sticks having defects in volume 2 and not in volume 1 are put in group 2. Sticks with defects outside of volumes 1 and 2 go to group 3. In Table 4, for beams loaded at third points, the unit strength values and the relative strength for the different groups are given. The modulus of rupture for groups 1 and 2 is about 75 per cent of that in group 3. Minor test pieces free from defects were cut from the main beams in order to obtain the relative strength of these small clear pieces in the different groups.

It will be noted that the strength of the small test pieces cut from the sticks in group 3 was greater than that of those in groups 1 and 2. All of the sticks were green, and the results are therefore on the same moisture basis. This indicates that part of the variation in the strength of the 3 groups of large sticks is due to inherent differences in the wood fiber. The selection of such sticks as those in group 3 (sticks without defects in volumes 1 and 2) usually would involve close, firm growth, because of the fact that rapid growth and knots generally occur together. Table 5 gives the strength of the groups for sticks loaded at the center point of the span.

A series of tests was also made to determine the weakening effect of knots on Douglas fir. In these tests volume 1 and volume 2 included the middle two-thirds of the stick one-quarter of the height from the edges. The beams were loaded at the center. From Table

6, giving the results of these tests, it is seen that the effect is about the same.

The following is a general rule for classifying sticks with reference to knots, wavy grain, and other defects.

Class 1.—Sticks clear in middle half, one-quarter of height from top and bottom (not necessarily clear in remaining volume).

Class 2.—Sticks having defects in middle half, one-quarter of height from top or bottom.

The strength of sticks in class 2 may be taken as 75 per cent of the strength of sticks in class 1.

EFFECT OF SEASONING.

It appears that the strength of large sticks changes very little for the range of moisture usually met with in practice. Small pieces when kiln-dried increase in strength as much as 300 per cent, but large beams can not be dried out to the same extent. Moreover, the drying process often produces checks and ring shakes, the weakening effects of which more than counterbalance any gain in strength due to seasoning. (See Table 2, reference numbers 1-3).

LONGLEAF PINE.

Longleaf pine has been for a long time the standard construction timber, not only on account of its strength, hardness, and durability, but also on account of the good lengths of heartwood that can be obtained free from knots.

Longleaf pine timber has been very extensively tested, not only in small sticks, but, more rarely, in large sticks as well. In the markets at present any heart pine, whether longleaf, shortleaf, or loblolly, which shows a close-ringed, hard texture, is sold under the name of longleaf pine, while the wider ringed, more rapid, and sappy growth is sold as shortleaf pine. The names "Georgia pine" and "Alabama pine" are often used to designate timber coming from the tracts of longleaf pine in those States.

The tests given in Table 2 represent longleaf pine of an excellent merchantable quality. The timber from South Carolina (reference number 6), was obtained in the Philadelphia market and had been cut about two years when tested. That from Georgia was purchased at New Haven, Conn., and had been on the market about six months. It was of better quality than that ordinarily found in the market as "merchantable" stock.

The modulus of rupture of South Carolina longleaf (reference number 6), is 7,160 pounds per square inch, and the modulus of

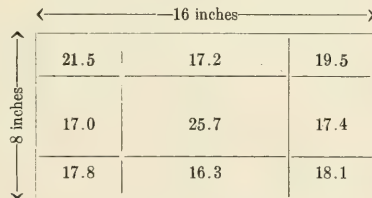
elasticity 1,560,000 pounds per square inch. The strength values, which are higher in the case of the Georgia timber, are 8,384 and 1,820,000 pounds per square inch, respectively. The moisture is about the same in both cases, but the rate of growth is somewhat less in the Georgia material. The average dry weight per cubic foot in the Georgia pine is 42.9 pounds as against 36.2 pounds for the South Carolina material. Table 11 (reference number 2) gives the strength of small clear pieces cut from the main sticks. The strength ratio of the large to the small sticks is 0.77 for the fiber stress at elastic limit, 0.79 for the modulus of rupture, and 1.01 for the modulus of elasticity.

The crushing strength parallel to grain for longleaf pine is 4,800 pounds per square inch (Table 12, reference number 5). The material contained 26.3 per cent moisture.

The compressive strength at elastic limit at right angles to grain is 572 pounds per square inch (Table 13, reference number 2).

The shearing strength parallel to grain for small specimens is 973 pounds per square inch (Table 14, reference number 2).

In Diagram III is shown the moisture distribution in the cross section of beams air-dried for two years.



Average 23.3 per cent.

DIAGRAM III.—Average of two sections of longleaf pine taken from sticks 12 by 12 inches and 8 by 16 inches by 16 feet long, air-dried two years. Average per cent. of sapwood 2.

From this diagram it may be seen that in beams air-dried for two years the drying did not penetrate to the center. It is very noticeable in the tests that longleaf pine tends to check upon drying out and to fail by longitudinal shear. In the case of the sticks in Table 8, reference number 3, 9 out of the 22 failed by longitudinal shear. The longitudinal shearing stress in the beams that failed in that manner was 335 pounds per square inch. The shearing strength of longleaf pine, as determined from small blocks, is 973 pounds per square inch (Table 14, reference number 2). From this it will be seen that the beams were so weakened by checks, shakes, etc., due to seasoning, that only about one-third of the longitudinal section was left in a condition to resist shear.

TAMARACK.

Tamarack reaches its best development north of the United States boundary, in Canada. It extends southward to northern Pennsylvania, northern Indiana and Illinois, and central Minnesota. In the United States tamarack occurs in pure stands in cold, deep swamps, which it often clothes with forests of densely crowded trees rarely more than 40 or 50 feet in height. The maximum height of 60 feet and the maximum diameter of 20 inches are rarely attained in the United States. The trunk is straight and tapers rather rapidly; it clears itself readily of branches even when growing in fairly open stands. Tamarack lumber is cut principally in Wisconsin, Michigan, and Minnesota.

The results of bending tests on green tamarack are contained in Table 2, reference number 8. The modulus of rupture is 4,562 pounds per square inch, and the modulus of elasticity 1,219,000 pounds per square inch. The oven-dry weight is 30.1 pounds per cubic foot, and the moisture was 50.6 per cent.

NORWAY PINE.

Norway pine reaches its best development in the United States in the northern parts of Michigan, Wisconsin, and Minnesota, usually forming groves of a few hundred acres in extent on light, sandy loam or dry, rocky ridges. It ordinarily reaches a height of 75 feet and a diameter of 30 inches, though sometimes twice these dimensions are attained. The trunk is straight and clear of branches. The wood is rather close-grained, is pale red when air-dried, and has a thin ring of sapwood. Norway pine is cut and sold with white pine in the Lake States under the name of northern pine. It probably makes up about one-third of the present pine cut in this region.

Table 2, reference number 9, contains the results of bending tests on green Norway pine. The modulus of rupture is 3,975 pounds per square inch; and the modulus of elasticity 1,189,000 pounds per square inch. The oven-dry weight is 25.4 pounds per cubic foot. The moisture in the green material was 47.8 per cent.

DOUGLAS FIR.

The Douglas fir of the Pacific coast is also known commercially as yellow fir, red fir, Oregon pine, and Douglas spruce. The name Douglas fir is, however, gradually becoming established. A single species, *Pseudotsuga taxifolia*, furnishes the timber. Its range ex-

tends from Lower California to central British Columbia, and from the Pacific Ocean to the Rocky Mountains. This timber reaches its best development in western Washington and Oregon, between the summit of the Cascade Mountains and the Pacific. Almost pure forests are found here, which frequently yield from 50,000 to 100,000 board feet per acre. In these regions the tree will average 5 to 6 feet in diameter at the butt, with a height up to 300 feet. The trunk is straight and readily clears itself of branches.

It is possible, therefore, to obtain exceptionally large and long pieces for structural purposes. Sticks 24 inches square and up to 100 feet long are regularly listed and obtainable in the merchantable grades. The possibility of procuring such large pieces, combined with the exceptional strength and stiffness of the material compared with its weight, renders Douglas fir an ideal structural timber. It is almost entirely heartwood, and is fairly durable when exposed to the weather.

Small trees varying from 1 to 3 feet in diameter are unsurpassed for spars, owing to the straightness of the trunk, the small taper, and the great length obtainable. Douglas fir is almost exclusively used on the Pacific coast for piling for docks and foundations for heavy structures in soft-ground. The standard dimensions for this purpose are 12 inches in diameter and from 60 to 70 feet long.

In the green logs from mature trees the sapwood forms a narrow, light-colored ring, extending usually not more than 2 inches beneath the bark. In the seasoned timber, however, it can seldom be distinguished by color. Although the grading rules allow sapwood only on the corners for the merchantable grades, lumbermen have no difficulty in meeting the requirements.

The color of the wood of Douglas fir ranges from a light yellow to a pronounced red; the grain varies from as few as 4 or 5 rings per inch, in small trees or in heartwood, to a fine, even grain with upward of 40 rings per inch. The rings are usually strongly marked, the summer wood being very dense and dark, and the spring wood much softer. The wide-ringed wood is somewhat spongy. Owing to the marked difference in the texture of the alternate rings and to the long, regular fiber, the wood splits easily, especially when dry. For the same reason it is particularly pleasing for inside finish, paneling, etc., when slash-sawed, for the porous spring wood readily absorbs wood stains, whereas the dense summer rings are little affected, so that any desired shade may be secured.

Douglas fir is cut into every form of lumber, from rough timbers, used in the framing of heavy structures of all kinds where strength

and durability are required, to the fine-grained, clear stock for flooring.

The mechanical tests were made upon market products. The sticks were graded by an experienced lumber inspector, according to the Pacific coast standard of 1900, and, as is usual in the timber tests of the Forest Service, the grading of the inspector was found to correspond closely to the average results of the mechanical tests. The sizes given in Table 7, reference numbers 1 to 8, are those generally used in railroad work for bridge, trestle, and car construction.

It is evident from Table 7 that Douglas fir is of varied quality and that specifications need to be drawn somewhat more carefully than in the case of longleaf pine in order to exclude the wider-ringed quick growth and knotty sticks.

From an average of all grades and sizes in Table 7, reference number 4, it appears that the modulus of rupture of partially air-dried beams is 6,975 pounds per square inch, the modulus of elasticity 1,600,000 pounds per square inch, and the oven-dry weight per cubic foot 27.7 pounds, or 33.8 pounds per cubic foot as tested in a partially dry condition. The average rate of growth was about 15 rings per inch—that is to say, the tree added 1 inch to its radius, or 2 inches to its diameter, in fifteen years.

In green beams an average of all grades and sizes (Table 7, reference number 8) shows a modulus of rupture of 6,140 pounds per square inch, a modulus of elasticity of 1,526,000 pounds per square inch, and an oven-dry weight per cubic foot of 29.4, or 38.4 pounds per cubic foot as tested in a green condition. The rate of growth of the green beams was 10.8 rings per inch.

Table 11, reference number 3, gives the comparative bending strength of large and small sticks. The ratio is 0.77 for fiber stress at elastic limit, 0.71 for modulus of rupture, and 0.99 for modulus of elasticity, in the case of partially air-dried beams, and 0.71, 0.72, and 0.87, respectively, in the case of green beams (reference number 4).

Table 12, reference number 6, gives the crushing strength parallel to grain for Douglas fir as 4,406 pounds per square inch for partially air-dried timber. In the case of green timber (reference number 7) the crushing strength is 3,590 pounds per square inch.

Table 13, reference number 3, shows the compressive strength at elastic limit, at right angles to the grain, to be 651 pounds per square inch.

Table 14, reference number 3, gives the shearing strength parallel to grain of small blocks of partially air-dry Douglas fir as 770 pounds per square inch.

Table 8, reference number 4, shows that out of 216 tests on partially air-dry Douglas fir 54 beams failed in longitudinal shear at a shearing stress of 313 pounds per square inch (average of the three sets of partially air-dry material).

The results of the tests show that there is no marked difference in strength between fir stringers of red and of yellow color, provided the sticks have the same rate of growth and are equally free from defects.

A series of tests on small, clear, straight-grained sticks indicates that a rate of growth resulting in 21 rings per inch gives the greatest density and strength.

The partially air-dry sticks were tested in from six months to one year from the time of sawing. They were kept in a shed and sprinkled to prevent drying out. The exterior parts of the beams contained less moisture than the centers, but the difference was not marked. An examination of the distribution of the moisture throughout the cross section of the 8 by 16 inch beams showed relations which are exhibited in Diagram IV. A 1-inch cross section taken midway of the stick was divided into 9 parts at third points, as shown, and the moisture in the several parts of the sections determined. The figures in the diagram are the average percentages of moisture found in each part.

← 16 inches →		
22.7 per cent.	24.2 per cent.	22.6 per cent.
25.1 per cent.	27.2 per cent.	24.5 per cent.
22.3 per cent.	24.8 per cent.	22.4 per cent.
8 inches		

Average 23.9 per cent.

DIAGRAM IV.—Distribution of moisture in cross section midway of the length of Douglas fir sticks. (Average of six sections taken from sticks 8 by 16 inches by 16 feet.)

WESTERN HEMLOCK.

The introduction of western hemlock to the market as a building material has met with many obstacles. Without doubt the one offering the greatest opposition to the introduction has been the strong prejudice aroused by the name of hemlock, based upon the qualities of the eastern species. So great is this prejudice even now that, although large quantities of the timber are cut and sold, it is sold under false or fictitious names, such as Alaska pine and Washington pine, spruce, or fir. Western hemlock, as such, has so far had little market standing.

Western hemlock reaches its best development in Washington, in the region lying between the summit of the Cascade Mountains and the coast, but is also found from Alaska to central California and as far east as Idaho and Montana. The tree, where conditions best favor its development, reaches 4 feet in diameter at the butt and 200 feet in height. The trunk is straight and cylindrical, but does not readily clear itself of branches. This causes small knots in the timber and makes it impossible to obtain much clear lumber except from large trees.

The wood of the mature tree is hard, straight and even grained, and nearly white in color. The sour odor of the lumber is unmistakable. There is not the marked difference in either color or hardness between the spring and summer wood that is noticeable in Douglas fir. The wood does not split readily, and is light and tough. These qualities make it especially suitable for box manufacture. Knots are rather frequent, often dark brown to almost black in color, but usually tight and sound. The regular and even structure of the wood and the total absence of pitch render it capable of rapid kiln drying at high temperature without injury.

For flooring, molding, paneling, and all inside finish western hemlock makes a superior lumber, not easily scratched, susceptible of a high polish, and of excellent wearing qualities.

In point of strength, as shown by the tests, western hemlock is suitable for all except the heaviest structures.

The tests of partially air-dried western hemlock recorded in the tables were made upon timbers cut in Washington.

It is difficult to apply to western hemlock the grading rules adopted for Douglas fir, as these rules would throw most of the hemlock sticks into the "seconds" grade. New rules should be made for western hemlock, in order to bring the sticks of better quality into the "merchantable" grade.

Table 7, reference number 12, shows as the average of the results of bending tests on all grades of partially air-dried beams a modulus of rupture of 5,992 pounds per square inch, a modulus of elasticity of 1,351,000 pounds per square inch, and an oven-dry weight per cubic foot of 26 pounds. The rate of growth of these sticks was 12.7 rings per inch.

For all grades of green beams (Table 7, reference number 16) the modulus of rupture is 5,783 pounds per square inch, the modulus of elasticity 1,475,000 pounds per square inch, and the oven-dry weight 28.5 pounds per cubic foot. The moisture in the green beams was 36.2 per cent, against 27.8 per cent for the partially air-dried beams.

Table 11, reference number 5, gives the ratio of the bending strength of the large green sticks to the small sticks cut from them. This ratio is 0.70 for fiber stress at elastic limit, 0.70 for modulus of rupture, and 0.97 for modulus of elasticity.

Table 12, reference number 8, gives the crushing strength of partially air-dry western hemlock as 3,705 pounds per square inch.

Table 13, reference number 4, gives the compressive strength at elastic limit at right angles to grain as 477 pounds per square inch.

Table 14, reference number 4, gives the shearing strength, parallel to grain for small sticks as 746 pounds per square inch.

Table 8, reference number 6, shows that out of 64 tests on western hemlock, 12 failed in longitudinal shear. The shearing stress in the beams failing in longitudinal shear was 273 pounds per square inch.

Approved: JAMES WILSON,

Secretary of Agriculture.

Washington, D. C., September 25, 1907.

APPENDIX.

The revised rules of inspection and grading referred to in this circular are here reproduced.

From the Interstate Rules of 1905 for the Classification and Inspection of Yellow Pine Lumber.

GENERAL RULES.

All lumber must be sound, commercial longleaf yellow pine (pine containing large, coarse knots with coarse grain is excluded under these rules), well manufactured, full to size and saw butted, and shall be free from the following defects: Unsound, loose, and hollow knots, wormholes and knot holes, through shakes or round shakes that show on the surface, and shall be square edge unless otherwise specified.

A through shake is hereby defined to be through or connected from side to side, edge to edge, or side to edge.

Where terms one-half or two-thirds heart are used they shall be construed as referring to the area of the face on which measured.

CLASSIFICATION.

Dimensions.—Dimension sizes shall embrace all sizes 6 inches and up in thickness by 6 inches and up in width. For example: 6 by 6, 6 by 7, 7 by 7, 7 by 8, 8 by 9, and up.

INSPECTION.

*Standard.**—All lumber shall be sound; sap no objection. Wane may be allowed one-eighth of the width of the piece measured across face of wane, extending one-fourth of the length on one corner or its equivalent on two or more corners, provided that not over 10 per cent. of the pieces of any one size shall show such wane.

Merchantable.—All sizes under 9 inches shall show some heart entire length on one side; sizes 9 inches and over shall show some heart the entire length on two opposite sides. Wane may be allowed one-eighth of the width of the piece, measured across face of wane, and extending one-fourth of the length of the piece on one corner or its equivalent on two or more corners, provided that not over 10 per cent. of the pieces of any one size shall show such wane.

Prime Dimension sizes. All square lumber shall show two-thirds heart on two sides and not less than one-half heart on two other sides. Other sizes shall show two-thirds heart on face and show heart two-thirds of length on edges, excepting when the width exceeds the thickness by 3 inches or over; then it shall show heart on the edge for one-half of the length.

From the Pacific coast standard grading rules for Douglas fir [red fir], adopted 1900.

MERCHANTABLE.

This grade shall consist of sound, strong lumber, free from shakes, large, loose, or rotten knots and defects that materially impair its strength; well manufactured and suitable for good substantial constructional purposes.

*Called "square edge" in South Carolina and in this circular.

Will allow—

Occasional variations in sawing or occasional scant thicknesses, sound knots, pitch seams, and sap on corners, one-third the width and one-half the thickness. Defects in all cases to be considered in connection with the size of the piece and its general quality.

SECONDS.

This grade shall consist of lumber having defects which exclude it from grading as merchantable.

Will allow—

Knots and defects which render it unfit for good substantial constructional purposes, but suitable for an inferior class of work.

SELECTS.

Shall be sound, strong lumber, good grain, well sawed.

Will allow—

In sizes 6 by 6 and less, knots not to exceed 1 inch in diameter; sap on corners one-fourth the width and one-half the thickness; small pitch seams when not exceeding 6 inches in length.

In sizes over 6 by 6, knots not to exceed 2 inches in diameter, varying according to the size of the piece; sap on corner not to exceed 3 inches on both face and edge; pitch seams not to exceed 8 inches in length.

Defects in all cases to be considered in connection with the size of the piece and its general quality.

DESCRIPTION OF MATERIAL.

The limits of this circular will not allow a detailed description of the sticks tested, but in order to show the nature of the information collected the following descriptions are given:

HISTORY OF SHIPMENT "A" DOUGLAS FIR.

Cut in township 17 south, range 2 east, Willamette meridian, on McKenzie River, west slope Cascade Mountains, Lane County, Oregon. Shipped from Coburg, Ore., May 8; received at Berkeley, Cal., May 25, 1903.

Douglas fir, shipment "A," 6 by 8 average select.

Rings per inch, 13; color, medium yellow; imperfections: Side *a*, one weather check; side *b*, pitch seam; side *c*, pitch seam, weather checks; side *d*, pitch seam; weather checks.

Douglas fir, shipment "A," 6 by 8 maximum select.

Rings per inch, 20.5; color, medium yellow; imperfections: Side *a*, three knots 0.5 to 0.7 inch in diameter, small weather checks; side *b*, clear; side *c*, weather checks; side *d*, clear.

Douglas fir, shipment "A," 6 by 8 minimum select.

Rings per inch, 21; color, medium yellow; imperfections: Side *a*, weather checks; side *b*, pitch seam; side *c*, one-half inch knot and weather checks; side *d*, pitch seam.

Douglas fir, shipment "A," 6 by 8 average merchantable.

Rings per inch, 22; color, medium red; imperfections: Side *a*, 2 knots about 1 inch in diameter, weather checks; side *b*, 1 knot 3 by 2½ inches, broken out; side *c*, 6 knots 1 to 1½ inches in diameter, checks; side *d*, 1 small knot.

Douglas fir, shipment "A," 6 by 8 maximum merchantable.

Rings per inch, 22 color, medium yellow; imperfections: Side *a*, clear; side *b*, clear; side *c*, two ½-inch sound knots; side *d*, clear.

Douglas fir, shipment "A," 6 by 8 minimum merchantable.

Rings per inch, 25; color, medium yellow; imperfections: Side *a*, one ½-inch sound knot; side *b*, clear; side *c*, 8 knots from ½ to 1 inch in diameter; side *d*, 2 knots.

Douglas fir, shipment "A," 6 by 8 average seconds.

Rings per inch, 8; color, medium red; imperfections: Side *a*, 16 sound knots ½ to 2 inches in diameter, check; side *b*, 4 knots 1 to 1½ inches in diameter, sound; side *c*, 6 loose knots 1 to 1½ inches in diameter, checked; side *d*, 5 knots from 1 to 1½ inches in diameter, all sound.

Douglas fir, shipment "A," 6 by 8 maximum seconds.

Rings per inch, 18; color, medium red; imperfections: Side *a*, 3 knots 1 to 2½ inches in diameter, 2 loose; side *b*, 7 knots 1 to 3 inches in diameter, loose; side *c*, 4 loose knots 1 inch in diameter, pitch seam; side *d*, no knots, pitch seam and check.

Douglas fir, shipment "A," 6 by 8 minimum seconds.

Rings per inch, 5.4; color, medium red; imperfections: Side *a*, 13 knots ½ to 1½ inches in diameter, 2 loose, weather checks; side *b*, 5 knots ½ to 1½ inches in diameter, 2 loose; weather checks; side *c*, 5 knots ½ to 1½ inches in diameter, 1 loose, weather checks; side *d* 11 knots ½ to 2 inches in diameter, 3 loose, weather checks.

Loblolly pine, 8 by 8 average square edge, green.

History: From Urban Wharf, King and Queen County, Va.; in yard one week. Rings per inch, 2.6; color, light yellow; imperfections: Side *a*, 11 knots from 1 to 3 inches in diameter, all sap; side *b*, 6 knots about 2 inches in diameter, all sap; side *c*, 6 knots from 2½ to 4½ inches in diameter, all sap; side *d*, 9 knots from 1½ to 3 inches in diameter, all sap.

Loblolly pine, 8 by 8 maximum square edge, green.

Rings per inch, 3.2; color, light yellow; imperfections: Side *a*, 8 knots from 1 to 2½ inches in diameter; side *b*, 7 knots from 1½ to 3 inches in diameter; side *c*, 5 knots from ½ to 3 inches in diameter; side *d*, 7 knots from 1 to 4 inches in diameter, sap on all four faces.

Loblolly pine, 8 by 8 minimum square edge, green.

Rings per inch, 3; color, light yellow, turning to yellowish white on exposure; imperfection: Side *a*, 3 knots; side *b*, 6 knots; side *c*, 7 knots; side *d*, 8 knots from 3 to 5 inches in diameter.

Western hemlock, 8 by 16 maximum merchantable.

History: Cut in township 20 south, range 1 east, Willamette meridian, west slope Cascade Mountains, Lane County, Oregon. Shipped from Saginaw May 12, received at Berkeley, Cal., May 25, 1903. Rings per inch, 11.8; imperfections: Side *a*, 11 knots $\frac{1}{2}$ to 1 inch in diameter, 3 loose, weather checks; side *b*, badly weather checked; side *c*, 10 knots $\frac{1}{2}$ to 1 inch in diameter, 6 loose, weather checked; side *d*, 2 knots $1\frac{1}{2}$ inches in diameter, sound, weather checked.

Western hemlock, 8 by 16 minimum merchantable.

Rings per inch, 11; imperfections: Side *a*, 10 small knots $\frac{1}{2}$ to $1\frac{1}{2}$ inches in diameter, 4 loose, 6 sound; side *b*, 3 knots, 2 loose; side *c*, 8 knots, all sound, checked; side *d*, 2 knots, both loose, weather checked.

Loblolly pine, 8 by 14 average square edge.

History: Felled about September 1, 1903; sawed at mill September 15; tested November 4, 1903. Rings per inch, 7; color, sap, greenish white; imperfections: Side *a*, all sap; side *b*, three-fourths sap; side *c*, all sap; side *d*, 7 knots 1 to $1\frac{1}{2}$ inches in diameter, two-thirds sap.

Loblolly pine, 8 by 14 maximum square edge.

Rings per inch, 6; color, heart, brown; sap, greenish white; imperfections: Side *a*, all sap; side *b*, 10 knots $\frac{1}{2}$ to $3\frac{1}{2}$ inches in diameter, one-half sap; side *c*, all sap; side *d*, one $\frac{1}{2}$ -inch knot; two-thirds sap.

Loblolly pine, 8 by 14 minimum square edge.

Rings per inch, 5.8; color, sap, greenish white, heart, brown; imperfections: side *a*, all sap; side *b*, seven-eighths sap, one 2-inch knot; side *c*, all sap; side *d*, nine-tenths sap.

Longleaf pine, 10 by 12 average merchantable.

History: Grown in southern Georgia; in lumber yard since February, 1902; tested September 24, 1902. Rings per inch, 13; imperfections: Side *a*, $1\frac{1}{2}$ by $2\frac{1}{2}$ inch knot in upper half of side; side *b*, 2 small knots in upper half of side, 1.1 by $\frac{1}{2}$ inch and $1\frac{1}{2}$ by $1\frac{1}{4}$ inch; side *c*, 4 small knots in center of side, 0.2 by 0.25 inch, 1.4 by 0.2 inch, 1.2 by 2 inch, and 0.7 by 0.5 inch; side *d*, 4 small knots and slight checks near upper end, 1.0 by 0.25 inch, 2.2 by 0.2 inch, 1.1 by 0.25 inch, 1.0 by 0.6 inch.

Longleaf pine, 10 by 12 maximum merchantable.

Rings per inch, 14; imperfections: A few slight checks in each side; 1 knot in side *a*, 3 by 4 inches, and 1 in side *d*, 2.5 by $\frac{1}{2}$ inches.

Longleaf pine, 10 by 12 minimum merchantable.

Rings per inch, 13; imperfections: Side *a*, 3 knots, $\frac{1}{2}$ by $\frac{1}{2}$ inch, $\frac{1}{2}$ by $\frac{1}{2}$ inch, $\frac{1}{4}$ by $\frac{1}{4}$ inch, checks; side *b*, 4 knots, $1\frac{1}{2}$ by $1\frac{1}{2}$ inches, $1\frac{1}{2}$ by $1\frac{1}{2}$ inches, 1 by 1 inch, 1 by 1 inch; side *c*, 6 knots, $\frac{1}{2}$ by $\frac{1}{2}$ inch, $\frac{1}{2}$ by $\frac{1}{2}$ inch, 1 by $1\frac{1}{2}$ inches, 1 by 1 inch, $\frac{1}{2}$ by $\frac{1}{2}$ inch, 1 by 1 inch; side *d*, 1 knot $\frac{1}{2}$ by $\frac{1}{2}$ inch.

TABLE 2.—*Bending strength of large sticks.*

LOBLOLLY PINE.

Reference number.	Locality of growth.	Dimensions.		Grade.	Condition of seasoning.	Number of tests.	Moisture per cent.	Rings per inch.	Specific gravity, dry.	Weight per cu. ft.		Fiber stress at elastic limit.	Modulus of rupture.	Modulus of elasticity.	Elastic resilience.	Number failing by longt. shear.	Remarks.
		Section.	Span.							As tested.	Oven dry.						
1	South Carolina..	6"x 7"	10'0" to 15'6".	Square edge..	Green.....	Average.... Maximum... Minimum...	{ 48.0 92.1 30.2 }	{ 5.7 11.7 2.3 }	{ .50 .60 .40 }	Lbs.	Lbs.	Lbs. sq. in.	Lbs. sq. in.	1,000 lbs. per sq. in.	Inch lbs. per sq. in.	{ 7 0.45 0.99 0.07 }	{ Moisture above saturation point in all cases.
		6"x10"								46.2	31.2	3,150	5,580	1,426	0.45		
		4"x12"								56.8	37.5	5,210	8,460	1,920	.99		
		6"x16"								35.6	25.0	1,675	3,120	905	.07		
		8"x14"															
2	South Carolina..	6"x 7"	10'0" to 16'0".	Square edge..	Partially air dry.	Average.... Maximum... Minimum...	{ 27.7 29.2 25.5 }	{ 5.0 8.2 2.5 }	{ .50 .55 .45 }	40.0	31.2	3,380	5,650	1,435	.45	{ 0 .76 .20 }	{ Moisture from 25 to 30 per cent.
		4"x12"								43.7	34.4	4,610	8,090	1,880	.76		
		6"x10"								35.6	28.1	2,115	3,600	1,152	.20		
		6"x16"															
		10"x16"															
3	South Carolina..	6"x 7"	10'0" to 15'0".	Square edge..	Partially air dry.	Average.... Maximum... Minimum...	{ 21.0 24.9 15.0 }	{ 5.6 17.2 2.7 }	{ .50 .58 .41 }	37.5	31.2	2,970	5,000	1,340	.60	{ 2 .69 .10 }	{ Moisture—less than 25 per cent.
		4"x12"								45.6	36.2	4,850	8,100	2,040	.69		
		6"x10"								31.2	25.6	1,730	2,910	906	.10		
		6"x16"															
		8"x 8"															
4	Virginia.....	6"x 8"	6'0" to 16'0".	Square edge..	Partially air dry.	Average.... Maximum... Minimum...	{ 22.4 27.7 17.8 }	{ 4.8 8.8 2.5 }	{ .46 .58 .37 }	35.6	28.8	3,260	5,180	1,180	.51	{ 0 1.05 1.13 }	{ }
		6"x10"								43.1	36.2	5,300	8,950	1,728	1.05		
		6"x16"								30.0	23.1	1,280	2,180	606	.13		
5	Virginia.....	8"x 8"	6'0" to 15'6".	Square edge..	Green.....	Average.... Maximum... Minimum...	{ 64.0 100.5 33.8 }	{ 3.0 4.0 2.5 }	{ .43 .51 .35 }	43.7	26.9	1,935	3,490	744	.31	{ 0 .78 .12 }	{ Very rapid growth; poor quality.
										51.9	31.9	3,185	4,720	1,193	.78		
										35.0	21.9	956	2,180	357	.12		

LONGLEAF PINE.

6	South Carolina...	6"x 8" 10"x 10"	15'0"	Merchantable..	Partially dry.	Average.... Maximum.... Minimum....	22 { 25.0 13.7 0.58 40.3 25.4 .76 17.3 6.2 .50	45.6 60.0 39.4	36.2 47.5 31.2	3,800 4,970 2,220	7,160 10,020 5,450	1,560 2,010 1,190	0.53 .78 .21	9 } }
7	Georgia.....	10"x 12"	15'0"	Merchantable..	Partially dry.	Average.... Maximum.... Minimum....	22 { 27.3 18.0 .69 34.5 29.0 .79 20.0 11.0 .50	54.7 49.4 31.4	42.9 49.4 31.4	5,581 9,600 3,547	8,384 11,410 4,836	1,820 2,820 1,167	..... ..... .....	6 } }

{ Excellent }
{ Merchant-
{ able grade.

TAMARACK.

8	Minnesota.....	4"x 10" 6"x 12"	13'6"	Merchantable..	Green.....	Average.... Maximum.... Minimum....	30 { 50.6 14.0 0.48 72.1 24.4 .60 31.4 7.3 .43	45.2 52.9 39.6	30.1 37.6 26.9	2,810 3,750 1,431	4,562 6,080 2,040	1,219 1,538 797	0.62 1.02 .24	4 } }
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NORWAY PINE.

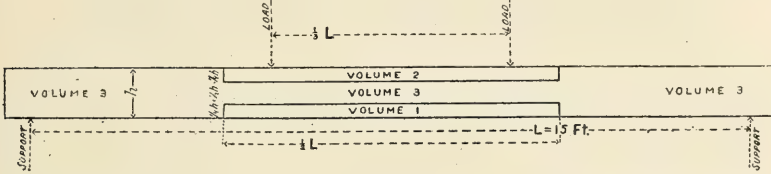
9	Minnesota.....	4"x 10" 4"x 12" 6"x 12"	13'6"	Merchantable..	Green.....	Average.... Maximum.... Minimum....	49 { 47.8 13.6 0.41 85.8 32.4 .48 29.5 6.7 .35	37.4 45.6 29.7	25.4 29.9 20.9	2,550 3,915 1,600	3,975 5,625 2,810	1,189 1,700 808	0.52 1.03 .22	7 } }
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TABLE 3.—*Loblolly pine—Bending tests on beams seasoned under different conditions.*

[8"x16" section—13½' to 15' span.]

	Number of tests.	Fiber stress at elastic limit.	Modulus of rupture.	Longitudinal shear at max. load.	Modulus of elasticity.	Moisture per cent.	Rings per inch.	Weight per cu. ft. oven dry.	Condition of seasoning.
		<i>Lbs. per sq. in.</i>	<i>Lbs. per sq. in.</i>	<i>Lbs. per sq. in.</i>	<i>1,000 lbs. per sq. in.</i>			<i>Lbs.</i>	
Average...	4	3,580	5,480	364 ₄	1,780	23.2	9.4	33.7	Air dry 3½ months in the open.
Maximum..		4,070	6,600	440	1,987	24.3	11.5	34.5	
Minimum..		3,090	5,000	327	1,530	21.5	8.0	32.5	
Average...	5	4,512	5,060	333 ₃	1,685	20	7.7	33.9	Kiln dry 6 days.
Maximum..		5,840	7,320	488	1,790	22	10.2	38.0	
Minimum..		3,180	2,150	143	1,410	18	4.7	27.7	
Average...	12	4,331	6,721	493 ₉	1,688	7.7	Air dry 21 months under shelter.
Maximum..		4,990	8,560	620	2,002	.....	9.5	.....
Minimum..		3,110	5,160	380	1,398	.....	5.5	.....

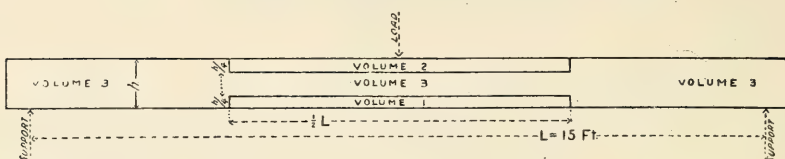
NOTE.—Figures written as subscripts to the figures for longitudinal shear indicate the number of sticks failing in that manner.

TABLE 4.—*Loblolly pine*—Effect of knots; beams loaded at two points.


The diagram shows a horizontal beam of total length L = 15 Ft. It is divided into three equal volumes, each 5 Ft. long. Volume 1 is on the left, Volume 2 in the middle, and Volume 3 on the right. Two vertical dashed lines represent loading points, each labeled 'Support' at the ends and 'L/2' at the top. The distance between the loading points is 5 Ft. The beam is shown in cross-section with a height 'h' and a width 'b'.

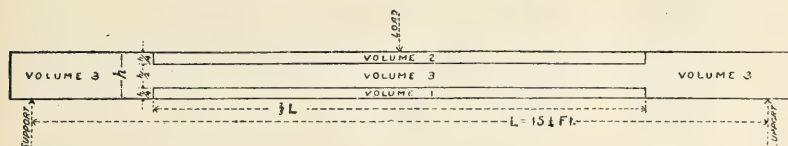
		Number of tests.	Per cent. of sap.	Rings per inch.	Mois- ture, per cent.	Spec- ific grav- ity dry.	Fiber stress at elastic limit.	Mod- ulus of rup- ture.	Mod- ulus of elas- ticity.	Longi- tudinal shear at maxi- mum load.	Num- ber failing due to defect in vol- ume.
Group 1. Sticks having defects in volume 1.	Average.. Maximum Minimum.	33	{ 42 92 8	{ 5.6 8.2 3.2	{ 65 101 40	{ 0.495 .578 .438	{ Lbs. per sq. in. 2,830 3,820 2,050	{ Lbs. per sq. in. 4,580 6,130 2,300	{ 1,000 lbs. per sq. in. 1,365 1,875 912	{ 252 307 114	23
Group 2. Sticks having defects in volume 2 and not in volume 1.	Average.. Maximum Minimum.	15	{ 52 85 0	{ 6.2 10.0 4.0	{ 75 101 38	{ .481 .510 .440	{ 3,000 3,810 2,010	{ 5,030 6,510 3,640	{ 1,375 1,623 1,070	{ 252 325 182	12
Group 3. Sticks having defects in volume 3 and not in volumes 1 and 2.	Average.. Maximum Minimum.	11	{ 45 93 12	{ 6.5 9.2 5.5	{ 57 62 47	{ .460 .470 .440	{ 3,820 4,540 3,310	{ 6,390 7,260 5,420	{ 1,675 2,040 1,260	{ 318 363 271	0
Relative values.											
Group 3.....			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.....
Group 2.....			93.3	95.5	131.7	104.4	78.6	78.6	82.1	79.2	.....
Group 1.....			115.5	86.2	114.0	107.7	74.1	71.7	81.5	71.7	.....
Minors free from defects.											
Cut from group 1.	Average.. Maximum Minimum.	19	{	{ 6.0 10.0 3.0	{ 23.6 34.7 19.6	{ .452 .536 .397	{ 4,766 6,080 2,860	{ 7,798 9,030 5,790	{ 1,360 1,652 797	{ 259 298 192	.....
Cut from group 2.	Average.. Maximum Minimum.	12	{	{ 8.2 12.0 5.5	{ 28.0 51.1 21.6	{ .482 .527 .448	{ 4,730 5,770 3,770	{ 8,230 9,110 6,930	{ 1,585 2,154 1,076	{ 273 301 229	.....
Cut from group 3.	Average.. Maximum Minimum.	20	{	{ 9.6 28.0 3.0	{ 23.6 26.5 20.4	{ .510 .692 .438	{ 5,170 6,500 4,220	{ 9,260 12,470 7,070	{ 1,550 1,880 1,075	{ 306 412 235	.....
Relative values.											
Group 3.....				100.0	100.0	100.0	100.0	100.0	100.0	100.0	.....
Group 2.....				85.5	118.6	94.6	91.5	88.8	102.5	89.3	.....
Group 1.....				62.5	100.0	88.7	92.3	84.2	87.7	84.6	.....

TABLE 5.—Loblolly pine—Effect of knots; beams loaded at center.



		Number of tests.	Per cent. of sap.	Rings per inch.	Mois- ture, per cent.	Spe- cific grav- ity dry.	Fiber stress at elastic limit.	Mod- ulus of rup- ture.	Mod- ulus of elas- ticity.	Longi- tudinal shear at maxi- mum load.	Num- ber fail- ing due to defect in vol- ume.
							Lbs. per sq. in.	Lbs. per sq. in.	1,000 lbs. per sq. in.	Lbs. per sq. in.	
Group 1. Sticks having defects in volume 1.	Average.. Maximum Minimum.	21	{ 33 100 3	{ 4.6 8.0 2.6	{ 54 120 28	{ 49 62 40	{ 2,660 3,320 1,600	{ 4,420 5,720 2,810	{ 1,210 1,475 887	{ 152 182 94	17
Group 2. Sticks having defects in volume 2 and not in volume 1.	Average.. Maximum Minimum.	4	{ 21 30 15	{ 6.5 10.7 5.0	{ 36 47 30	{ 50 55 47	{ 3,607 4,370 3,270	{ 5,930 7,120 4,890	{ 1,350 1,785 1,180	{ 200 237 168	2
Group 3. Sticks having defects in volume 3 and not in volumes 1 and 2.	Average.. Maximum Minimum.	9	{ 49 98 5	{ 6.0 9.3 4.1	{ 62 103 28	{ 50 54 46	{ 3,380 4,200 2,880	{ 5,800 6,450 4,860	{ 1,500 1,930 1,063	{ 193 210 170	0
Relative values.											
Group 3.....			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.....
Group 2.....			43.0	108.0	58.0	100.0	107.0	102.0	90.0	103.5	.....
Group 1.....			67.3	76.7	87.0	98.0	78.7	76.3	80.7	79.0	.....

TABLE 6.—Douglas fir—Effect of knots; beams loaded at center.



		Number of tests.	Rings per inch.	Mois- ture, per cent.	Spe- cific grav- ity dry.	Fiber stress at elastic limit.	Modu- lus of rup- ture.	Modu- lus of elas- ticity.	Longi- tudinal shear at maxi- mum load.
						Lbs. per sq. in.	Lbs. per sq. in.	1,000 lbs. per sq. in.	Lbs. per sq. in.
Group 1. Sticks having defects in volume 1.	Average....	75	9.8	30.8	.454	3,720	5,540	1,435	236
	Maximum....		20.0	36.9	.509	5,860	8,270	1,945	350
	Minimum....		3.5	23.7	.390	2,050	2,930	947	125
Group 2. Sticks having defects in volume 2 and not in volume 1.	Average....	30	12.2	31.3	.472	4,298	6,590	1,575	282
	Maximum....		23.4	35.1	.550	5,920	8,210	2,000	345
	Minimum....		5.2	21.8	.410	2,960	4,120	1,305	175
Group 3. Sticks having defects in volume 3 and not in volumes 1 and 2.	Average....	30	12.0	30.9	.483	4,650	7,130	1,710	302
	Maximum....		25.5	37.1	.543	5,900	9,000	2,070	381
	Minimum....		6.6	22.3	.429	3,020	3,720	1,370	218
Relative values									
Group 3.....			100.0	100.0	100.0	100.0	100.0	100.0	100.0
Group 2.....			101.5	101.3	97.7	92.5	92.4	92.2	93.3
Group 1.....			81.7	99.7	94.0	80.1	77.7	83.9	78.2
Minors free from defects.									
Cut from group 1....	Average....	97	10.5	30.3	.448	5,230	7,970	1,610	332
	Maximum....		23.1	43.5	.537	8,220	10,700	3,035	444
	Minimum....		3.3	23.0	.389	2,560	5,140	612	215
Cut from group 2....	Average....	74	12.9	29.9	.473	5,730	8,690	1,880	361
	Maximum....		29.1	44.5	.585	8,020	11,550	2,923	481
	Minimum....		3.5	22.7	.319	3,090	5,850	1,230	244
Cut from group 3....	Average....	99	12.0	29.5	.482	5,880	8,880	1,810	371
	Maximum....		23.1	40.0	.568	8,220	10,450	3,646	444
	Minimum....		3.3	24.1	.403	2,560	5,140	612	215
Relative values.									
Group 3.....			100.0	100.0	100.0	100.0	100.0	100.0	100.0
Group 2.....			107.5	101.5	98.2	97.6	97.8	104.0	97.3
Group 1.....			87.5	102.8	92.9	90.5	89.8	88.9	89.5

TABLE 7.—*Bending strength of large sticks.*

DOUGLAS FIR.

Reference No.	Locality of growth.	Dimensions.		Grade.	Condition of seasoning.	Number of tests.	Moisture per cent.	Rings per inch.	Specific gravity dry.	Weight per cu. ft.		Fiber stress at elastic limit.	Modulus of rupture.	Modulus of elasticity.	Elastic resilience.	Number failing by longt. shear.
		Section.	Span.							As tested.	Oven dry.					
1	Oregon and Washington.	8"x16" 6"x8" 5"x8"	7 and 16'	Select.....	Partially air dry.	Average.... Maximum.... Minimum....	(21.8 30.5 13.1)	18.8 33.0 7.0	0.46 .57 .37	Lbs. 35.0	Lbs. 28.8 35.6 22.9	Lbs. per sq. in. 5,579 9,300 2,730	Lbs. per sq. in. 8,184 11,880 4,560	1,000 lbs. per sq. in. 1,725 2,665 1,110	Inch- lbs. per cu. in. 1.02 2.66 .34	31
2	Oregon and Washington.	8"x16" 6"x8" 5"x8"	7 and 16'	Merchantable..	Partially air dry.	Average.... Maximum.... Minimum....	(22.4 36.5 11.7)	14.1 33.0 4.0	.43 .55 .31	Lbs. 32.6	Lbs. 26.7 34.1 19.1	Lbs. per sq. in. 4,754 7,630 2,910	Lbs. per sq. in. 6,876 11,620 4,150	1,597 2,334 1,047	.81 1.89 .38	17
3	Oregon and Washington.	8"x16" 6"x8" 5"x8"	7 and 16'	Second.....	Partially air dry.	Average.... Maximum.... Minimum....	(22.2 34.7 13.5)	10.6 27.0 4.0	.44 .51 .37	Lbs. 33.7	Lbs. 27.6 31.9 22.8	Lbs. per sq. in. 3,858 6,570 1,290	Lbs. per sq. in. 5,106 9,970 1,980	1,408 2,000 762	.61 1.53 .10	6
4	Oregon and Washington.	8"x16" 6"x8" 5"x8"	7 and 16'	All grades....	Partially air dry.	Average.... Maximum.... Minimum....	(22.1 36.5 11.7)	15.1 33.0 4.0	.45 .57 .31	Lbs. 33.8	Lbs. 27.7 35.6 19.1	Lbs. per sq. in. 4,859 9,300 1,290	Lbs. per sq. in. 6,975 11,880 1,980	1,600 2,665 762	.85	54
5	Oregon.....	8"x16"	16'	Select.....	Green.....	Average.... Maximum.... Minimum....	(31.2 37.1 22.3)	11.7 25.5 6.0	.48 .54 .41	Lbs. 39.4	Lbs. 30.0 5,900 2,960	Lbs. per sq. in. 4,870 9,000 3,720	Lbs. per sq. in. 6,720 9,000 2,070	1,660 2,070 1,265	..... ..... .....	14
6	Oregon.....	8"x16"	16'	Merchantable..	Green.....	Average.... Maximum.... Minimum....	(31.4 36.9 21.8)	10.7 23.0 4.8	.46 .55 .39	Lbs. 37.7	Lbs. 28.7	Lbs. per sq. in. 4,030 8,750 2,640	Lbs. per sq. in. 6,140 1,895 3,900	1,510 1,895 1,050	..... ..... .....	10
7	Oregon.....	8"x16"	16'	Second.....	Green.....	Average.... Maximum.... Minimum....	(29.8 36.8 23.7)	9.6 20.0 3.5	.46 .50 .41	Lbs. 37.2	Lbs. 28.7	Lbs. per sq. in. 3,590 5,860 2,010	Lbs. per sq. in. 5,200 8,270 2,930	1,340 1,945 947	...............	.....
8	Oregon.....	8"x16"	16'	All grades....	Green.....	Average.... Maximum.... Minimum....	(30.9 37.1 21.8)	10.8 25.5 3.5	.47 .55 .39	Lbs. 38.4	Lbs. 29.4	Lbs. per sq. in. 4,050 5,920 2,010	Lbs. per sq. in. 6,140 9,000 2,930	1,526 2,070 947	..... ..... .....	26

WESTERN HEMLOCK.

9	Oregon and Washington.	8"x16" 6"x8"	7' and 16'	Select.....	Partially air dry.	Average.... Maximum.... Minimum....	19	(25.8 36.8 18.0)	15.5 30.0 9.0	0.42	32.7	26.0 31.7 21.1	4,370 6,380 2,963	6,876 9,100 3,980	1,373 2,081 965	3
10	Oregon and Washington.	8"x16" 6"x8"	7' and 16'	Merchantable..	Partially air dry.	Average.... Maximum.... Minimum....	23	(27.0 45.8 15.3)	13.1 19.0 8.0	.42	33.5	26.4 28.4 22.4	3,870 5,124 2,660	6,143 7,970 3,420	1,446 1,670 1,100	7
11	Oregon and Washington.	8"x16" 6"x8"	7' and 16'	Second.....	Partially air dry.	Average.... Maximum.... Minimum....	22	(30.0 51.2 18.2)	9.6 14.5 6.0	.41	33.5	25.8 28.0 23.2	3,398 4,690 2,270	5,071 6,470 3,900	1,231 1,464 985	2
12	Oregon and Washington.	8"x16" 6"x8"	7' and 16'	All grades....	Partially air dry.	Average.... Maximum.... Minimum....	64	(27.8 51.2 15.3)	12.7 30.0 6.0	.42	33.2	26.0 31.7 21.1	3,856 6,380 2,270	5,992 9,100 3,420	1,351 2,081 965	12
13	Washington.....	8"x16"	16'	Select.....	Green.....	Average.... Maximum.... Minimum....	9	(34.0 58.5 25.8)	20.4 27.2 12.4	.47 .53 .43	39.8 51.7 34.1	29.6 32.9 26.6	3,870 4,570 2,875	5,960 7,075 4,270	1,494 1,800 1,095	4
14	Washington.....	8"x16"	16'	Merchantable..	Green.....	Average.... Maximum.... Minimum....	9	(41.5 64.2 21.5)	19.8 28.1 10.3	.47 .55 .40	41.2 51.6 38.8	29.1 34.2 25.3	3,725 4,580 3,160	5,800 7,050 4,710	1,536 1,788 1,480	5
15	Washington.....	8"x16"	16'	Second.....	Green.....	Average.... Maximum.... Minimum....	12	(32.9 55.2 23.5)	18.8 26.5 9.2	.44 .48 .40	36.2 43.1 32.4	27.3 29.8 24.6	3,650 3,975 3,266	5,637 6,360 4,930	1,414 1,721 1,236	7
16	Washington.....	8"x16"	16'	All grades....	Green.....	Average.... Maximum.... Minimum....	30	(36.2 64.2 21.5)	19.6 28.1 9.2	.46 .55 .40	38.8 51.7 32.4	28.5 34.2 24.6	3,738 4,580 2,875	5,783 7,075 4,270	1,475 1,800 1,095	16

TABLE 8.—*Longitudinal shear in bending.*

LOBLOLLY PINE.

Ref- er- ence No.	Locality of growth.	Dimensions.	Condition of seasoning.	Mois- ture per cent.	Weight per cu. ft., oven dry.	Rings per inch.	Sticks failing in shear.			Sticks not failing in shear.		
							Num- ber of tests.	Longitudinal shear at maximum load in lbs. per sq. in.		Num- ber of tests.	Longitudinal shear at maximum load in lbs. per sq. in.	
								Aver- age.	Maxi- mum.		Aver- age.	Maxi- mum.
1	South Carolina.....	6"x 7"x10' to 8"x16"x16'.	Green.....	48.0	Lbs. 31.2	5.7	7	339	431	256	258	442
2	South Carolina.....	8"x16"x16'.....	Partially air dry.....			7.7	9	510	620	432	440	471

LONGLEAF PINE.

3	South Carolina.....	6"x8"x16' to 10"x16"x16'.	Partially air dry.....	25.0*	36.2	13.7	9	335	388	261	191	320
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DOUGLAS FIR.

4	Oregon and Washington.....	6"x 8"x 7'.....	{ Partially air dry.....	23.5	27.5	16.9	6	475	601	272	400	563
5	Oregon.....	6"x 8"x16'.....		22.4	27.9	15.8	7	300	517	146	146	413
		8"x16"x16'.....		21.3	27.6	13.5	41	291	395	173	244	390
		8"x16"x16'.....	Green.....	30.9	29.4	10.8	26	268			260	

WESTERN HEMLOCK.

6	Oregon and Washington.....	{ 6"x 8"x 7' 8"x16"x16'.....	{ Partially air dry.....	{ 28.9 26.8	{ 26.4 25.6	{ 11.5 13.8	{ 5 7	{ 304 250	{ 343 325	{ 270 131	{ 206 222	{ 480 318
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TAMARACK.

7	Minnesota.....	6"x12"x16'.....	Green.....	57.6	29.1	16.6	4	261	313	228	253	329
8	Minnesota.....	6"x12"x16'.....	Partially air dry.....	23.0	30.8	15.1	3	300	315	290	345	424

NORWAY PINE.

9	Minnesota.....	4"x10"x16'.....	{ Green.....	{ 45.6 47.8	{ 25.8 25.9	{ 13.3 12.5	1	234	234	234	195	266
10	Minnesota.....	6"x12"x16'.....		{ 47.8 50.3	{ 25.9 24.9	{ 12.5 14.7	4	268	313	227	230	318
		4"x10"x16'.....		{ 50.3 13.7	{ 24.9 28.0	{ 14.7 12.0	2	216	249	184	199	255
11	Minnesota.....	{ 6"x12"x16' 6"x12"x16'.....	{ Partially air dry.....	{ 16.7 16.7	{ 26.3 26.3	{ 8.1 8.1	0	278	278	278	286	293

NOTE.—In the tests listed under longleaf pine only the material from South Carolina was used..

TABLE 9.—*Distribution of moisture lengthwise in 20 sticks of North Carolina loblolly pine.*

Stick No.	Moisture per cent.		Stick No.	Moisture per cent.		Stick No.	Moisture per cent.	
	Section from center.	Section from quarter point.		Section from center.	Section from quarter point.		Section from center.	Section from quarter point.
53.....	36.1	35.1	60.....	29.7	30.7	67.....	47.6	54.4
54.....	26.5	25.7	61.....	40.0	36.3	68.....	55.1	41.6
55.....	35.2	35.3	62.....	36.4	38.3	69.....	36.5	33.9
56.....	27.9	27.9	63.....	30.0	28.3	70.....	36.3	27.1
57.....	27.4	27.1	64.....	41.5	43.3	71.....	46.4	45.8
58.....	28.8	28.6	65.....	30.9	31.2	72.....	58.2	60.3
59.....	27.9	27.7	66.....	50.8	49.9			

Moisture determined at center and at one-quarter point. Sticks 8 by 14 inches by 16 feet.

TABLE 10.—*Distribution of moisture lengthwise in 18 sticks of longleaf and loblolly pine.*

Stick No.	Moisture per cent.		Stick No.	Moisture per cent.		Stick No.	Moisture per cent.	
	Section from center.	Section from quarter point.		Section from center.	Section from quarter point.		Section from center.	Section from quarter point.
81.....	19.4	18.6	87.....	19.8	19.5	100.....	30.6	31.6
82.....	24.4	22.2	88.....	24.4	24.3	126.....	82.5	86.5
83.....	19.2	19.7	89.....	18.5	17.6	127.....	43.4	37.4
84.....	20.8	19.8	95.....	26.4	24.8	128.....	84.9	59.7
85.....	19.2	19.4	98.....	51.6	50.4	144.....	28.7	28.5
86.....	18.4	21.6	99.....	45.9	40.6	152.....	24.6	24.9

Moisture determined at center and side quarter points. Sticks 6 by 7 to 10 by 16 inches by 16 feet.

WESTERN HEMLOCK (GREEN).

5	Washington.....	6"x8"and 8"x16" 2"x2"	84"and 192" 24"	32 42	10.2 11.6	32.2 27.3	3,660 5,198	5,560 7,905	1,320 1,357	5,124 6,280	7,190 10,500	1,665 1,728	2,270 3,510	3,900 5,100	1,005 955
	Ratio of large sticks to small.						.70	.70	.97	.82	.69	.96	.65	.77	1.05

TAMARACK (GREEN).

6	Minnesota.....	4"x10"to 6"x12" 2"x2"	162" 30"	30 82	14.0 14.0	50.6 38.8	2,810 3,274	4,562 5,776	1,219 959	3,750 5,680	6,080 8,740	1,538 1,570	1,431 2,280	2,040 4,580	797 640
	Ratio of large sticks to small.						.86	.79	1.27	.66	.70	.98	.63	.45	1.25

NORWAY PINE (GREEN).

7	Minnesota.....	4"x10"to 6"x12" 2"x2"	162" 30"	49 133	13.6 11.4	47.8 32.3	2,550 2,808	3,975 5,173	1,189 960	3,915 5,100	5,625 7,610	1,700 1,578	1,600 1,420	2,810 3,070	808 495
	Ratio of large sticks to small.						.91	.77	1.24	.77	.74	1.08	1.13	.92	1.63

TABLE 12.—*Compressive strength parallel to grain.*
LOBLOLLY PINE.

Ref- er- ence No.	Locality of growth.	Dimensions.		Condition of seasoning.	Number of tests.	Moisture per cent.	Rings per inch.	Weight per cu. ft.		Compre- sive strength at elastic limit.	Crushing strength at maxi- mum load.
		Section.	Length.					As tested.	Oven dry.		
LONGLEAF PINE.											
1	South Carolina.	4"x8" to 5"x7"	12" to 30"	Partially air dry.	38	{ 24.5 29.1 19.7 }	{ 7.1 18.4 3.0 }	Lbs. 40	Lbs. 32	Lbs. per sq. in. 2,710 3,900 1,200	Lbs. per sq. in. 4,250 5,330 2,660
2	South Carolina.	4"x8" to 5"x7"	12" to 30"	Green.	25	{ 54.9 117.0 31.3 }	{ 5.0 8.0 3.0 }	44	28	2,380 2,890 1,602	3,510 4,325 2,560
3	Virginia.	4"x6" to 8"x8"	16" to 30"	Partially air dry.	10	{ 22.6 27.7 17.8 }	{ 4.9 8.8 2.5 }	36	29	2,217 3,210 1,170	2,950 4,490 1,580
4	Virginia.	8"x8"	18" to 32"	Green.	14	{ 63.4 100.5 33.8 }	{ 3.4 4.0 2.5 }	44	27	1,510 2,410 977	2,140 2,590 1,603
DOUGLAS FIR.											
5	Georgia.	4"x5" to 5"x6"	16"	Partially air dry.	46	{ 26.3 34.8 21.7 }	{ 18.0 29.0 11.0 }	46	36	3,480 5,010 2,387	4,800 5,950 3,290
6	Washington and Oregon.	6"x6"	18" to 30"	Partially air dry.	422	{ 20.5 35.3 12.1 }	{ 14.5 36.0 2.0 }	34	27.8	3,139 5,620 985	4,406 7,700 1,620
7	Oregon.	6"x6"	18"	Green.	428	{ 30.9 44.5 23.3 }	{ 10.0 25.3 3.0 }	37.8	28.9	2,840 5,000 1,390	3,500 5,380 1,910

WESTERN HEMLOCK.

8	Washington and Oregon.....	6"x6"	12" to 30"	Partially air dry.....	Average..... Maximum..... Minimum.....	130	{ 25.4 44.6 16.0 }	12.1 29.0 5.5	32	25.3	2,840 5,230 1,340	3,705 5,850 2,455
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TAMARACK.

9	Minnesota.....	4"x7" to 6"x7"	30"	Partially air dry.....	Average..... Maximum..... Minimum.....	10	{ 36.6 74.7 23.1 }	12.0 13.8 8.5	46	31	2,304 2,930 1,670	3,229 3,650 1,380
10	Minnesota.....	3½"x3½"	30"	Air dry.....	Average..... Maximum..... Minimum.....	62	{ 17.0 34.7 14.5 }	13.0 30.0 5.9	38.0 43.1 33.9	32.5 36.8 29.2	3,050 4,700 1,288	4,230 5,720 2,730

NORWAY PINE.

11	Minnesota.....	4"x7" to 6"x7"	30"	Partially air dry.....	Average..... Maximum..... Minimum.....	13	{ 28.6 54.6 21.1 }	10.7 16.7 6.2	33	26	2,090 2,725 1,555	2,560 3,180 2,020
12	Minnesota.....	3½"x3½"	30"	Air dry.....	Average..... Maximum..... Minimum.....	63	{ 14.9 19.6 13.1 }	13.5 33.0 4.5	31.2 39.3 25.5	27.2 34.0 21.4	3,350 5,360 1,460	4,320 6,700 2,400

TABLE 13.—*Compressive strength at elastic limit at right angles to grain.*
LOBLOLLY PINE.

Ref- er- ence No.	Locality of growth.	Dimensions.			Width of plate.	Condition of seasoning.	Number of tests.	Moisture per cent.	Rings per inch.	Weight per cu. ft., oven dry.	Compre- sive strength at elastic limit.
		Width.	Height.	Length.							
1	South Carolina and Virginia.....	4" to 8"	8"	24" to 30"	4"	Green.....	44	{ 57.1 117.0 30.4	4.7 10.0 2.5	Lbs. 28 40 20	Lbs. per sq. in. 469 875 195
						Average.....					
						Maximum.....					
						Minimum.....					
LONGLEAF PINE,											
2	South Carolina.....	3" to 4"	3" to 4"	12"	4"	Partially air dry.....	22	{ 25.1 30.9 21.7	18.0 29.0 11.0	36 43 31	572 875 375
						Average.....					
						Maximum.....					
						Minimum.....					
DOUGLAS FIR,											
3	Oregon and Washington.....	3" to 8"	4" to 16"	19" to 42"	4"	Partially air dry.....	374	{ 21.6 39.5 12.7	13.8 44.0 3.0	27.7 36.7 20.3	651 1,632 312
						Average.....					
						Maximum.....					
						Minimum.....					
WESTERN HEMLOCK.											
4	Oregon and Washington.....	3" to 8"	3" to 16"	13" to 30"	4"	Partially air dry.....	115	{ 28.3 61.0 15.4	12.7 34.0 5.0	25.6 33.1 19.3	477 988 234
						Average.....					
						Maximum.....					
						Minimum.....					

TABLE 14.—*Showing strength parallel to grain (small pieces).*

LOBLOLLY PINE.

Refer- ence No.	Locality of growth.	Area of sheared section.	Condition of seasoning.	Grade.	Number o tests.	Moisture per cent.	Rings per inch.	Weight per cu. ft. oven dry.	Shearing strength.
1	South Carolina and Virginia.....	3.5"x2"	Green.....	Average..... Maximum..... Minimum.....	121	{ 83.2 180.5 35.2 }	{ 4.3 12.5 2.0 }	Lbs. 30 1,056 276	Lbs. per sq. in. 630 1,056 276

LONGLEAF PINE.

2	Georgia.....	3.5"x2".....	Partially air dry.....	Average..... Maximum..... Minimum.....	44	{ 21.8 39.4 18.2 }	{ 20.0 39.0 8.0 }	{ 36 1,257 800 }
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DOUGLAS FIR.

3	Oregon and Washington.....	3.0"x1.5".....	Partially air dry.....	Average..... Maximum..... Minimum.....	758	{ 23.8 39.5 12.3 }	{ 15.0 50.0 2.0 }	{ 29.0 36.5 19.8 }
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WESTERN HEMLOCK.

4	Oregon and Washington.....	3.0"x1.5".....	Partially air dry.....	Average..... Maximum..... Minimum.....	196	{ 30.3 70.0 18.3 }	{ 12.4 34.0 5.0 }	{ 26.3 35.5 20.3 }
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TAMARACK.

5	Minnesota.....	1"x4" and 2"x4".....	Green.....	Average..... Maximum..... Minimum.....	24	{ 39.2 54.9 25.1 }	{ 9.1 27.0 4.0 }	{ *31.1 840 461 }
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NORWAY PINE.

6	Minnesota.....	1"x4" and 2"x4".....	Partially air dry.....	Average..... Maximum..... Minimum.....	20	{ 26.7 35.0 21.7 }	{ 7.5 15.0 5.0 }	{ *25.4 768 476 }
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* Oven-dry weight per cubic foot taken from main bending tests.

The Lime-Sulphur-Salt Wash and Its Substitutes

BY J. K. HAYWOOD,
Chief of Miscellaneous Laboratory, in Collaboration with the Bureau of Entomology.

INTRODUCTION.

During the past two years the Miscellaneous Laboratory of the Bureau of Chemistry, at the request of the Bureau of Entomology, has made a number of studies of the composition and decomposition of the lime-sulphur-salt wash and its substitutes, and the results of these studies have appeared in various publications from time to time. Recently much more extended studies have been made, which, together with the earlier work, are presented in the present report. All of the experiments reported in this bulletin have a practical significance and were conducted with a view to solving certain problems arising in actual practice, questions concerning which are often asked by correspondents both of the Bureau of Entomology and the Bureau of Chemistry.

Messrs. B. H. Smith and Charles Goodrich, of the Bureau of Chemistry, assisted in the analytical work, and Messrs. C. L. Marlatt and A. L. Quaintance of the Bureau of Entomology, made many valuable suggestions in regard to the solution of the problems presented.

THE LIME-SULPHUR-SALT WASH.

EFFECT OF TIME OF BOILING ON COMPOSITION OF WASH.

The first experiment was to determine the composition of the lime-sulphur-salt wash, using constant amounts of the various ingredients but boiling for varying lengths of time, or, in other words, to study the effect of the time of boiling on the composition of the wash. For this purpose chemically pure reagents were employed, and a fractional part of the following formula used: Lime 30 pounds, sulphur 20 pounds, salt 15 pounds, and water 60 gallons, the boiling being carried on in a closed enamel boiler. After mixing the above ingredients, and before heating, the volume of the mixture was determined, and in every experiment thereafter, whatever the time of boiling and the consequent reduction in volume, the total volume

was made up to the volume as first determined, and aliquot portions taken for analysis. Theoretically each 100 cc of such a mixture as the above should contain 5.55 grams of calcium oxid and 3.89 grams of sulphur, in case there had been no loss by volatilization or mechanically.

METHODS OF EXAMINING THE TOTAL WASH.

The mixture was boiled for the required length of time, made up to the correct volume as determined above, thoroughly shaken and 100 cc portions taken for analysis. This portion was weighed, poured through a weighed Gooch, well exhausted, and the residue dried at 110° C., and weighed. The difference between the total weight of 100 cc of the mixture and the weight of the residue was taken to be the weight of the liquid portion in 100 cc of the mixture. An aliquot portion of the liquid portion was weighed to obtain the weight of 1 cc. The total weight of the liquid divided by the weight of 1 cc gives the number of cubic centimeters of liquid in 100 cc of the whole mixture. The soluble sulphur and calcium oxid were next determined in 1 to 5 cc of the liquid. The results obtained on 1 cc of the liquid multiplied by the number of cubic centimeters of the liquid in 100 cc of the mixture give the weight of the dissolved sulphur and calcium oxid in 100 cc of the original wash. The residual and volatile sulphur reckoned together and the residual calcium oxid were obtained by subtracting the soluble sulphur and calcium oxid from the theoretical total amount of sulphur and calcium oxid, respectively. The method used for determining the soluble calcium oxid was the oxalate method usually employed, so it needs no explanation. The Avery method* for determining soluble sulphur was used. The following results were obtained on five washes boiled for different lengths of time:

TABLE 1.—*Lime and sulphur in 100 cc of the lime-sulphur-salt wash boiled for varying periods.*

Time of boiling. ^a	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium oxid.	Total calcium oxid.
<i>Minutes.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
15	3.03	0.86	3.89	1.64	3.91	5.55
30	3.66	.23	3.89	1.95	3.60	5.55
45	3.72	.17	3.89	1.93	3.62	5.55
60	3.75	.14	3.89	2.13	3.42	5.55
90	3.45	.42	3.89	1.85	3.70	5.55

^a The mixture was brought to a boil before the time was taken.

*U. S. Dept. Agr., Bureau of Chemistry, Bul. 90, p. 105; Cir. 10, Rev., p. 10.

From the above table it would appear (1) that the solid sulphur was not completely dissolved by 15 minutes' boiling; (2) that a 30-minute period of boiling was not quite long enough; (3) that a 45 to 60-minute period of boiling dissolved practically all of the sulphur present, and is consequently the best length of time to boil the wash to get a maximum amount of sulphur in solution. By continuing the boiling beyond one hour the mixture became very thick, with the quantity of materials used, and probably some of the sulphur was lost mechanically.

An attempt was next made to determine what compounds of sulphur are found in this wash, and whether they are changed by varying the period of boiling. To do this the following methods of analysis were used:

METHOD OF EXAMINING THE LIQUID PORTION OF THE WASH.

Sulphur in solution as sulphids.—Pipette 25 cc of the liquid portion of the wash into a 100 cc flask and make up to the mark. Use 10 cc of this, representing 2.5 cc of the original solution, for analysis. Add an ammoniacal zinc chlorid solution (made by dissolving 3.253 grams of pure zinc in hydrochloric acid, supersaturating with ammonia, and making up to a liter) until slightly in excess, as shown by adding a drop of the solution to nickel sulphate. Place on the steam bath and heat until the odor of ammonia becomes faint, filter, and wash. Transfer filter and contents to a beaker, add about 10 to 15 cc of a saturated solution of potassium hydroxid, and heat for some time. Add 50 cc of hydrogen dioxid, free of sulphates, and heat on the steam bath exactly 30 minutes. Acidify with hydrochloric acid and precipitate with barium chlorid in the usual way.

Sulphur in solution as thiosulphates.—Pipette 5 cc of the original solution into a 50 cc flask and add ammoniacal zinc chlorid until it is slightly in excess, as shown by nickel sulphate. Make this mixture up to the mark, shake, and filter off through a dry filter. To a 25 cc aliquot of the filtrate add methyl orange and titrate with tenth-normal hydrochloric acid to exact neutrality. Next titrate the liquid with a tenth-normal iodine solution. The reading thus obtained gives the total thiosulphates and sulphites; since, however, the sulphites are present in such small amounts as to be negligible the number of cubic centimeters of iodine solution used may be considered to represent only the thiosulphates.

Sulphur as combined sulphates and sulphites.—Proceed as in the preceding method to the point where the thiosulphates have been

changed to tetrathionates, and sulphites to sulphates by the addition of tenth-normal iodine. Make slightly acid with hydrochloric acid and precipitate the combined sulphates and sulphites (now sulphates) with barium chlorid in the usual way.*

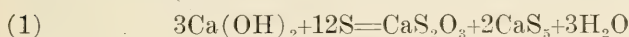
Working by these methods the following results were obtained on the liquid portion of the wash:

TABLE II.—Sulphur compounds in 100 cc of the liquid portion of the lime-sulphur-salt wash boiled for varying periods.

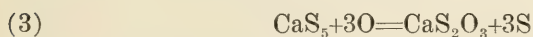
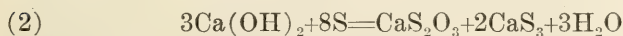
Time of boiling.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphates and sulphites.	Total sulphur.
<i>Minutes.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
15	0.63	2.59	0.004	3.224
30	.76	2.91	.004	3.674
60	.84	2.91	.01	3.76
90	.86	2.92	.01	3.79

Three points are brought out by the above results: (1) A 1-hour period of boiling dissolves practically all of the sulphur; (2) the thiosulphates are somewhat increased by a more prolonged period of boiling; (3) the combined sulphates and sulphites are somewhat increased by a more prolonged period of boiling.

Reactions involved.—It is probable that the primary reaction in the combination of sulphur and lime which takes place is as follows:



Such a reaction, however, would lead to the formation of less sulphur as thiosulphate and more sulphur as pentasulphid than is indicated in Table II. It is therefore probable that either one or both of the two following secondary reactions take place, both of which would lead to the formation of more thiosulphate and less polysulphid, thus approximating the figures in the table.

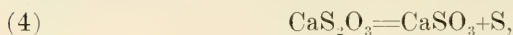


The sulphur set free in this last reaction would on further boiling combine with more lime to form thiosulphate and polysulphid. If the boiling be continued, it will be seen that more thiosulphate

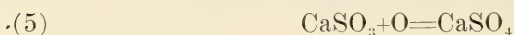
* This method of analysis and those that follow are combinations of Avery's method for determining sulphur with certain methods given in Sutton's Volumetric Analysis, modified to meet the conditions here presented.

would constantly be formed at the expense of the pentasulphid. Since the figures given indicate that more thiosulphate and less polysulphid are formed than is indicated by the first theoretical equation, it is probable that equation (3) is the principal or only secondary reaction leading to the formation of thiosulphate.

It is well known that thiosulphates in solution change slowly to sulphites, which in turn change to sulphates, according to the following reactions:



and



It is therefore probable that sulphates and sulphites are found in the wash because of the above changes. The five reactions given are well known and can be found in any of the leading books of reference.* As would be expected, therefore, there are found in the lime-sulphur-salt wash comparatively large quantities of pentasulphid and thiosulphate and extremely small quantities of sulphates and sulphites.

EFFECT OF SODIUM CHLORID ON THE COMPOSITION OF THE WASH.

An experiment was next carried out to determine whether or not the sodium chlorid used had any influence upon the amount and relative quantities of the various sulphur compounds in the wash. The same formula was used as in the first experiment, and a 1-hour period of boiling employed for both the wash with salt and the wash without salt. The following results were obtained:

TABLE III.—*Sulphur compounds in 100 cc of the liquid portion of the wash with and without salt.*

Composition of the wash.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphites and sulphates.	Total sulphur.
	Grams.	Grams.	Grams.	Grams.
Lime-salt-sulphur.....	0.84	2.91	0.01	3.76
Lime-sulphur.....	.88	2.92		3.80

It is evident from these results that salt has practically no influence upon the composition of the wash in so far as the sulphur compounds are concerned, and therefore the following experiments were performed without the addition of salt.

* Mendeleeff's Principles of Chemistry; Thorpe's Dictionary of Applied Chemistry; Fremy's Chemical Encyclopædia, etc.

EFFECT OF COMMERCIAL REAGENTS AND CHANGE OF FORMULA ON THE LIME-SULPHUR WASH.

To ascertain whether approximately the same time was required to get all sulphur in solution if high grade commercial reagents were employed instead of chemically pure ones, and also whether changing the formula from the one previously used to one commonly employed by orchardists had any influence upon the time necessary to get a maximum amount of sulphur in solution, another set of experiments was conducted. The formula used was as follows: Lime 20 pounds, sulphur 15 pounds, and water 50 gallons, good grades of commercial stone lime and sulphur being used. The results obtained are given in Tables IV and V.

TABLE IV.—*Lime and sulphur in 100 cc of lime-sulphur wash, using modified formula and commercial reagents.*

Time of boiling.	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium oxid.	Total calcium oxid.
Minutes.	Grams.	Grams.	Grams.	Grams.	Grams.	Grams.
15	2.50	0.90	3.40	1.30	3.20	4.50
30	3.13	.27	3.40	1.69	2.81	4.50
45	3.19	.21	3.40	1.78	2.72	4.50
60	3.18	.22	3.40	1.88	2.62	4.50
120	3.19	.21	3.40	1.87	2.63	4.50

TABLE V.—*Sulphur compounds in 100 cc of the liquid portion of the lime-sulphur wash, using modified formula and commercial reagents.*

Time of boiling.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphates and sulphites.	Total sulphur.
Minutes.	Grams.	Grams.	Grams.	Grams.
15	0.48	2.05	0.02	2.55
30	.63	2.54	.02	3.19
45	.68	2.54	.02	3.24
60	.69	2.52	.02	3.23
120	.74	2.50	.02	3.26

From these results it is evident (1) that the solid sulphur was not completely dissolved by 15 minutes' boiling; (2) that a 30-minute period of boiling was not quite sufficient; (3) that a 45 to 60 minute period of boiling dissolved practically all the sulphur; (4) that the thiosulphates were somewhat increased by a more prolonged period of boiling. Since these are exactly the same as the conclusions reached in the first experiment, it is evident that a slight change in formula has no influence upon the time of boiling necessary to dis-

solve all the sulphur, nor has a substitution of high grade commercial lime and sulphur for the chemically pure articles any influence upon the same point.

LIME-SULPHUR WASHES PREPARED ACCORDING TO DIFFERENT FORMULAS.

The next set of experiments was to determine the composition of lime-sulphur mixtures boiled the same length of time (one hour), but containing varying quantities of lime and sulphur. Fractional parts of the following formulas were used in preparing the mixtures.

TABLE VI.—*Various formulas used in preparing experimental lime-sulphur washes*

Number of experiment.	Sulphur.	Lime.	Water.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Gallons.</i>
1	25	30	50
2	25	20	50
3	15	25	50
4	15	20	50
5	15	15	50

The results obtained on the five different washes described in Table VI are given in Tables VII and VIII.

TABLE VII.—*Lime and sulphur in 100 cc of five lime-sulphur washes of varying composition.*

Number of experiment.	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium oxid.	Total calcium oxid.
	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
1	5.22	0.48	5.70	2.89	3.91	6.80
2	5.30	.40	5.70	2.76	1.74	4.50
3	3.20	.20	3.40	1.80	3.90	5.70
4	3.17	.23	3.40	1.76	2.74	4.50
5	3.17	.23	3.40	1.73	1.67	3.40

TABLE VIII.—*Sulphur compound in 100 cc of the liquid portion of fine lime-sulphur washes of varying composition.*

Number of experiment.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphites and sulphates.	Total sulphur.
	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
1	1.08	4.26	0.02	5.36
2	.99	4.34	.02	5.35
3	.69	2.53	.01	3.23
4	.67	2.53	.01	3.21
5	.66	2.53	.01	3.20

From these results the following conclusions are drawn:

(1) The proportion of one part of lime to one of sulphur gives more than enough lime to dissolve the maximum amount of sulphur. (Experiment 5.)

(2) If more lime than the amount first mentioned is added in proportion to the sulphur it only remains present as so much excess lime and does not aid in the solution of more sulphur. (Experiments 3, 4, 5.)

(3) With a constant amount of sulphur present and varying amounts of lime, not only is the total sulphur practically constant but the various sulphur compounds present are the same. (Experiments 3, 4, 5.)

(4) Twenty-five pounds of sulphur per 50 gallons is about the maximum quantity, or a little more than the maximum quantity, that can be dissolved. This fact is shown, not only by the residual sulphur being present in considerable quantities in the two formulas where 25 pounds of sulphur were used (experiments 1 and 2), but also by the fact that in both of these cases when the wash cooled down to room temperature needles of an orange color, evidently a sulphur compound, crystallized out.

(5) It would also appear from experiment 2 that sufficient lime is present when it is used in the proportion of 1 part of lime to $1\frac{1}{4}$ parts of sulphur, but the experiment on this point is marred by the fact that in this formula as much or a little more sulphur is present than can go into solution in the amount of water used. According to the theoretical reaction one could use almost twice as much sulphur as lime and yet get all the sulphur in solution. It is extremely doubtful, however, whether the reaction would completely take place under these circumstances or whether, if it did so, it would not require an exceedingly long period of boiling. In addition to these considerations, in practice a moderate excess of lime is needed to exert its caustic action on the scale.

Taking all of these points into consideration it would appear, on purely theoretical grounds, that approximately the following formula should be used to obtain, at a minimum cost, a wash with the maximum amount of sulphur in solution and a moderate excess of lime, namely—water 50 gallons, lime 20 to 22.5 pounds, sulphur 22.5 pounds. Whether or not this formula would give the best results in actual orchard practice is a subject for experimentation.

LIME-SULPHUR WASHES PREPARED WITH DIFFERENT KINDS OF LIME.

Experiments were next conducted to determine what effect the use of air-slaked lime instead of quicklime would have on the composition of a wash prepared according to one of the common formulas. For this purpose the formula, lime 20 pounds, sulphur 15 pounds, water 50 gallons, with a 1-hour period of boiling, was used. The air-slaked lime employed had not of course been left in the air a sufficient length of time to entirely change to carbonate but was merely the powder left after stone lime had fully slaked in the open air. The results obtained are given in Tables IX and X.

TABLE IX.—*Lime and sulphur in 100 cc of lime-sulphur wash, using air-slaked and quicklime.*

Kind of lime.	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.
	Grams.	Grams.	Grams.	Grams.
Quicklime.....	3.18	0.22	3.40	1.88
Air-slaked	3.26	.14	3.40	1.62

TABLE X.—*Sulphur compounds in 100 cc of the liquid portion of lime-sulphur wash, using air-slaked and quicklime.*

Kind of lime.	Sulphur as thiosulphate.	Sulphur as sulphids and polysulphids.	Sulphur as sulphates and sulphites.	Total sulphur.
	Grams.	Grams.	Grams.	Grams.
Quicklime.....	0.69	2.52	0.02	3.23
Air-slaked.....	.68	2.60	.02	3.30

From these figures it is evident that the employment of moderately air-slaked lime has practically no influence on the composition of the wash. The sulphur compounds formed are nearly the same in amount as when quicklime is used, but the amount of lime in solution appears to be slightly larger when quicklime is employed. The writer is more inclined to ascribe this slight difference in the amount of dissolved lime to slight errors in the analysis than to any real difference. It is self-evident that if the air-slaked lime were left in the air long enough to become wholly changed to carbonate it could not be used to prepare the wash.

LIME-SULPHUR WASHES PREPARED WITH THE HEAT GENERATED BY QUICKLIME.

In this experiment, to determine whether a lime-sulphur wash could be prepared with no external heat, using only the heat generated by slaking the lime, a constant amount of sulphur was used and varying amounts of lime. The wash so obtained was then compared with a wash prepared by the same formula, but boiled until the maximum amount of sulphur had dissolved. Following are the formulas used and the results obtained:

TABLE XI.—*Formulas used for preparing lime-sulphur washes.*

Number of experiment.	Lime.	Sulphur.	Water.	Time of heating.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Gallons.</i>	<i>Hours.</i>
1	40	15	50	0
2	30	15	50	9
3	30	15	50	1

TABLE XII.—*Lime and sulphur in 100 cc of lime-sulphur washes prepared by boiling and with the heat of slaking lime.*

Number of experiment.	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium oxid.	Total calcium oxid.
	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
1.....	0.25	3.15	3.40	0.23	8.77	9.00
2.....	.19	3.21	3.40	.20	6.60	6.80
3 (Boiled).....	3.16	.24	3.40	1.74	5.06	6.80

TABLE XIII.—*Sulphur compounds in 100 cc of the liquid portion of lime-sulphur washes prepared by boiling and with the heat of slaking lime.*

Number of experiment.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphates and sulphites.	Total sulphur.
	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
1.....	0.04	0.21	0.02	0.27
2.....	.03	.15	.02	.20
3 (Boiled).....	.71	2.50	.03	3.24

From these experiments it is evident that a satisfactory wash can not be made with the heat generated by slaking lime, not even if a large excess of lime is used so that a maximum amount of heat will be generated.

LIME-SULPHUR WASHES PREPARED WITH DIFFERENT FORMS OF SULPHUR.

In this experiment, to determine the effect of the form of sulphur used on the composition of the wash, the following formula was employed and the boiling continued for 1 hour: lime 20 pounds, sulphur 15 pounds, water 50 gallons. Three forms of sulphur were used, namely, flowers of sulphur, flour sulphur, and another form known in the South as crystallized sulphur. The last-named form of sulphur comes from Louisiana and is obtained from the ore by melting out the sulphur and allowing it to solidify as brimstone. It is then shipped in lumps as it breaks under the pick. It presents smooth, hard, crystalline surfaces to view. The following results were obtained:

TABLE XIV.—*Lime and sulphur in 100 cc of lime-sulphur washes prepared with different forms of sulphur.*

Form of sulphur used	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium oxid.	Total calcium oxid.
	Grams.	Grams.	Grams.	Grams.	Grams.	Grams.
Flowers.....	3.17	0.23	3.40	1.76	2.74	4.50
Flour.....	3.30	.10	3.40	1.81	2.69	4.50
Crystalline.....	3.06	.34	3.40	1.51	2.99	4.50
	1.36	2.04	3.40	.70	3.80	4.50

TABLE XV.—*Sulphur compounds in 100 cc of the liquid portion of lime-sulphur washes prepared with different forms of sulphur.*

Form of sulphur used.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphates and sulphites.	Total sulphur.
	Grams.	Grams.	Grams.	Grams.
Flowers.....	0.68	2.55	0.02	3.25
Flour.....	.68	2.67	.02	3.37
Crystalline.....	.58	2.53	.01	3.12
	.27	1.11	.01	1.39

It is evident from these analyses that there is practically no difference in the washes prepared with flowers of sulphur and flour sulphur, and that crystalline sulphur gives a wash of extremely variable composition, depending, no doubt, on the size of the particles of sulphur used and the time of boiling.

LIME-SULPHUR WASHES PREPARED WITH GROUND CRYSTALLINE SULPHUR.

Since the preceding experiment showed that the crystalline sulphur when used without powdering gave a wash of extremely variable composition, the following experiment was planned to determine what kind of a wash this form of sulphur would give if it were finely powdered, and how long it was necessary to boil the powdered crystalline sulphur to get all of the sulphur in solution.

The same formulas were used as described in the preceding experiment, but the sulphur was ground and boiled in the first experiment for 1½ hours, and in the second for 2 hours. The following results were obtained:

TABLE XVI.—*Lime and sulphur in 100 cc of the lime-sulphur wash, using ground crystalline sulphur.*

Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium oxid.	Total calcium oxid.	Time of boiling.
Grams.	Grams.	Grams.	Grams.	Grams.	Grams.	Hours.
3.04	0.36	3.40	1.76	2.74	4.50	1½
3.13	.27	3.40	1.80	2.70	4.50	2

TABLE XVII.—*Sulphur compounds in 100 cc of the liquid portion of the lime-sulphur wash, using ground crystalline sulphur.*

Sulphur as thiosulphate.	Sulphur as sulphids and polysulphids.	Sulphur as sulphates and sulphites.	Total sulphur.	Time of boiling.
Grams.	Grams.	Grams.	Grams.	Hours.
0.65	2.44	0.01	3.10	1½
.70	2.48	.01	3.19	2

From these figures it is evident that even if the crystallized sulphur is ground to quite a fine powder it is in such a form that it dissolves more slowly than the flowers of sulphur or the flour sulphur. It also appears that with the ground crystalline sulphur about 2 hours' boiling is necessary to get the maximum amount of sulphur in solution. This increased time necessary to dissolve the crystalline sulphur is evidently due to its physical characteristics.

COLOR OF THE LIME-SULPHUR WASH.

Before leaving the consideration of the composition of the lime-sulphur-salt or the lime-sulphur wash, a word in regard to the correct color of the wash may be of value. The writer has seen many different statements in regard to this matter. Some claim

that the wash when finally prepared should be yellow, some golden, some orange, some brown, and some olive green.

To test the color a wash was prepared with chemically pure lime and sulphur, boiling until all sulphur had dissolved. It was found that the color of the supernatant liquid was almost exactly the same as that of the skin of a dark, rusty-coated orange. When the mixture was stirred so that the white lime was evenly distributed throughout the solution, the color was much lighter. With most grades of commercial lime the colors of the supernatant liquid and of the total mixture were as just described; in the case of a few limes that came under the writer's observation, however, it was observed that the mixture when finally prepared was an olive green. On allowing the mixture to settle, the supernatant liquid was orange just as one would expect it to be, but the lime at the bottom was a deep olive green. It is therefore evident that the olive-green color of the mixture noted by some observers is due to impurities in the lime—probably compounds formed by the action of the sulphids of the wash on iron and manganese in the lime.

DECOMPOSITION OF THE LIME-SULPHUR-SALT WASH ON TREES.

An attempt was next made to determine what changes take place in the sulphur compounds of the wash when it is sprayed upon the tree. To imitate as closely as possible actual spraying conditions, measured samples of the filtered wash, 5 cc usually, were absorbed by a large quantity of filter paper, which had been cut in slips and placed in large porcelain dishes. These dishes were immediately put in the open air in direct sunlight and the paper allowed to dry. This usually took about one hour. The dishes were then placed in a protected place in the open air and allowed to stand for varying lengths of time. In one series of experiments the paper was moistened each morning to simulate the effect of dew; in another series it was allowed to remain undisturbed until analyzed.

From the studies already made of the composition of the wash, the following changes would be expected when the paper was allowed to dry in the open air: (1) The pentasulphid would be oxidized to thiosulphate and sulphur according to the equation: $\text{CaS}_5 + \text{O}_3 = \text{CaS}_2\text{O}_3 + \text{S}_3$. This would result in the formation of more thiosulphate than was already present, and the deposition of free sulphur in a very finely divided form. (2) The total thiosulphate would then be changed to some extent to sulphite and deposit free sulphur, i. e.: $\text{CaS}_2\text{O}_3 = \text{CaSO}_3 + \text{S}$. (3) The sulphite would then be partially oxidized to sulphate according to the equation: $\text{CaSO}_3 +$

$O=CaSO_4$. Finally, then, we would expect to find in the wash after it had dried on the tree, free sulphur, calcium triosulphate, and small quantities of calcium sulphate and sulphite. The longer the action of the air and the dew continued, the less calcium thiosulphates we would expect to find present and the more sulphites and sulphates. Of course calcium hydroxid would be present, which would gradually be changed to calcium carbonate. Sodium chlorid, in case it were used, appears to have no influence on the composition of the wash and would very likely remain as such on the tree.

To experimentally prove or disprove the above assumptions, a wash was prepared by boiling the following constituents together for one hour: Lime 30 pounds, sulphur 20 pounds, and water 50 gallons. The composition of 100 cc of the liquid portion of this wash was found to be as follows:

	Grams per 100 cc.
Sulphur as thiosulphates	0.85
Sulphur as polysulphids and sulphids.....	2.93
Sulphur as sulphates and sulphites.....	.02
Total	3.80

METHODS OF EXAMINING THE DECOMPOSED WASH.

The following methods were used to determine the composition of the wash after drying on filter paper.

Total free sulphur.—Extract the filter paper in a Soxhlet extractor with redistilled carbon bisulphid, evaporate the carbon bisulphid, dissolve the residual sulphur in concentrated potassium hydroxid by boiling, and determine the sulphur as sulphate according to the Avery method. Allow the filter paper remaining from the above treatment to stand till all the carbon bisulphid has evaporated, then beat it to a pulp with water and transfer the mass to a Gooch filter. Continue the extraction with water till the washings amount to about 450 cc of water, and determine the soluble sulphur compounds present in this filtrate. Repeat the washing with 450 cc of water several times, or until all the soluble sulphur compounds are extracted, and determine the sulphur compounds in the filtrates. Analyze the successive 450 portions of filtrate (sometimes amounting to three in number and even to six before all the soluble sulphur compounds are extracted) and add the results obtained, to get the total sulphur content in its variable soluble forms.

Sulphur as sulphids.—Remove a few drops of the first filtrate and test qualitatively for sulphids and polysulphids. (Neither

were found in the experiments reported.) Then analyze each 450 cc filtrate by the following methods: Add methyl orange and titrate the solution with tenth-normal hydrochloric acid to exact neutrality. Make up the volume to the 500 cc mark.

Sulphur as sulphates and sulphites.—Titrate a 250 cc portion of each of the above filtrates with iodine solution till the brown color of the iodine appears. Add a little more hydrochloric acid, boil the solution, precipitate with barium chloride in the usual manner, and finally weigh as barium sulphate. (By this method the thiosulphate is changed to tetrathionate and the sulphite to sulphate, so that sulphates and sulphites are determined together as sulphates. The weak point in this determination is the fact that the tetrathionate seems to decompose to a *very slight extent* in boiling with hydrochloric acid, thus forming sulphate.)

Sulphur as sulphites and thiosulphates.—Measure off in a beaker a known volume of tenth-normal iodine (about 4 cc for the first filtrate and 0.2 to 0.3 cc for the subsequent filtrates), add water and as much of the 250 cc of the neutral filtrate left above titrated against the iodine as is necessary to arrive at the end point, using starch as indicator. This figure represents the sulphite and thiosulphate in a known volume of the 500 cc filtrate, and can be calculated back to the amount of iodine necessary for the whole filtrate. The solution was titrated against the iodine rather than the iodine against the solution, because it has been found by many investigators that more constant results are obtained in this way.

Sulphur as sulphites.—To the solution in a known quantity of which the sulphites and thiosulphates have been determined, as above, by means of tenth-normal iodine, add a little methyl orange and titrate to neutrality with tenth-normal sodium hydroxide. From this figure calculate the sulphite present in the whole 500 cc filtrate. This method of analysis is based on the following principle: When thiosulphate is changed to a tetrathionate by iodine, there is no change in the reaction of the solution, because both the thiosulphate and tetrathionate are neutral. When a bisulphite which is neutral to methyl orange is oxidized, however, by iodine to bisulphate, the solution becomes acid, both from the hydriodic acid set free and the bisulphate formed, and the combined quantity of these two, as determined by tenth-normal sodium hydroxide, is a measure of the sulphite present. In the above analysis all sulphites were changed to bisulphites by the original titration of the solution with tenth-normal hydrochloric acid to neutrality.*

* A discussion of these methods of analysis is given on page 353 of the 8th edition of Sutton's Volumetric Analysis.

Sulphur as sulphates.—Subtract the sulphur as sulphites from the total sulphur as sulphates and sulphites.

Sulphur as thiosulphates.—Subtract from the total iodine figure obtained for thiosulphates and sulphites an amount of iodine corresponding to the sulphites as determined above and calculate the resulting iodine to thiosulphates.

Following are the results obtained on allowing four samples of the wash to stand in the open air for varying periods of time, after being absorbed by slips of filter paper.

TABLE XVIII.—*Composition of dry lime-sulphur-salt wash after standing.*

[Expressed in grams per 100 cc of solution.]

SAMPLES NOT WATERED.

Time of standing.	Free sulphur.	Sulphur as thiosulphates.	Sulphur as sulphites.	Sulphur as sulphates.	Total sulphur.
(a) 5 days.....	1.71	1.97	0.11	0.01	3.80
(b) 5 days.....	1.72	1.97	.10	.01	3.80
(c) 8 days.....	1.74	1.94	.137	.01	3.83
(d) 8 days.....	1.77	1.94	.12	.02	3.85

SAMPLES WATERED TO SIMULATE DEW.

(e) 10 days.....	1.94	1.66	0.22	.....	3.82
(f) 10 days.....	1.93	1.69	.20	.....	3.82
(g) 4 weeks.....	2.11	1.42	.29	0.15	a3.97
(h) 4 weeks.....	2.13	1.41	.27	.16	a3.97

* The rather high results obtained for total sulphur in these two determinations is doubtless owing to errors in analysis, especially in the thiosulphate figures. The method of analysis outlined above is very difficult of execution, even under the best circumstances. In these two determinations six extractions of 500 cc each were necessary to extract all soluble sulphur compounds. This resulted in very small amounts of material being present in the last four 500 cc filtrates, and consequently the chances of error in the determinations were increased.

From Table XVIII it is evident that just those changes take place in the wash when it dries on the tree that the theoretical equations would lead one to expect. Analyses (a) and (b), after 5 days, indicate that the following reaction has taken place: (1) $\text{CaS}_5 + \text{O}_3 = \text{CaS}_2\text{O}_3 + 3\text{S}$, resulting in a deposition of sulphur and an increased formation of calcium thiosulphate. These two analyses also indicate that the following reaction has begun: (2) $\text{CaS}_2\text{O}_3 = \text{CaSO}_3 + \text{S}$, resulting in the formation of more calcium sulphite and more free sulphur.

Analyses (c) and (d), after 8 days, indicate that the reaction shown above as (2) has gone still further and that the following reaction has commenced—(3) $\text{CaSO}_3 + \text{O} = \text{CaSO}_4$ —resulting in the formation of more calcium sulphate. Analyses (e) and (f), after

10 days, indicate that the rapidity of reactions (2) and (3) has been much increased by wetting the paper every day or in practice by the wetting of the branches every day by the dew.

Analyses (g) and (h), after 4 weeks, indicate that the above reactions (2) and (3) have gone still further, resulting in the breaking up of about one-fourth of the thiosulphate and the consequent increase in free sulphur, sulphates, and sulphites. If the decomposition of the wash continued at the same rate as is indicated above, it would take it about four or five months to completely decompose, at least under these artificial conditions. When the decomposition of the thiosulphate was complete a very large amount of free sulphur would still be upon the tree; calcium sulphate and calcium sulphite would also be present. Still later the sulphite would be oxidized to sulphate, so that finally only free sulphur and calcium sulphate would be present, after perhaps four to six months. In case of a very hot sun shining upon the tree the sulphur itself might be volatilized, leaving only calcium sulphate.

THEORY OF THE ACTION OF THE WASH ON INSECTS.

From the above data a theory can be formed in regard to the action of this wash. First, consider a case in which the wash, after being sprayed upon the tree, remains practically untouched by rains for several months, as in the dry climate of California, so that the products of decomposition remain on the tree a long time. First, the excess of lime in the wash is quite caustic, and thus loosens the scales from the tree and exposes the insects. Almost at once the pentasulphid, on decomposing, deposits sulphur in a very finely divided condition, which has its usual insecticidal value, but just how this is exerted is not known. The thiosulphate present in the wash, together with that formed by the decomposition of the pentasulphid, probably has some insecticidal properties also. Next the thiosulphate begins to decompose and sets free sulphite and more free sulphur. This decomposition of the thiosulphate probably extends over several months. It is a well-known fact that sulphites act as antiseptic agents. There is reason to believe that they would also act as insecticides. From the decomposition of the wash there are obtained sulphur in a very finely divided form, thiosulphate for a time, and sulphite which is gradually set free. The writer is of the opinion that these are the active agents in killing insects. This theory of the action of the wash would also explain why it continues to be efficacious over a considerable length of time.

In a wet climate, on the other hand, if a heavy rain should occur a day or two after the wash was applied, all the thiosulphate which was originally present, together with that which had been formed by the decomposition of the pentasulphid would probably be washed away. No sulphite could then be formed by slow decomposition of the thiosulphate. There would, therefore, be left upon the tree free sulphur as the only compound having insecticidal properties. The efficacy of the wash would, therefore, be much reduced. Again, if light rains occurred occasionally after the wash had been applied, its efficacy would be reduced just in proportion to the amount of thiosulphate and sulphite washed away.

It has been suggested by Mr. F. H. Pough, manager of the Bergen Port Sulphur Works of New York City, that the efficiency of the lime-sulphur-salt wash was due almost entirely to the finely divided sulphur set free on the decomposition of the pentasulphid. In support of this the widespread use of sulphur as a fungicide and insecticide was cited, more particularly its use for the prevention of the powdery mildew in vineyards, where it is often sprinkled on the hot ground to the windward of the plants, as well as on them; also to the value of sulphur dusting to destroy the red spider of citrus trees.

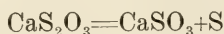
It is believed by Mr. Pough that the action of the wash is to be attributed to the gradual oxidation of sulphur which gives rise to sulphur dioxid, or sulphurous acid, where moisture is present, and that it is these constituents that do the work. In support of this theory he cites the cases where an odor resembling sulphur dioxid is plainly discernible on hot sunny days in the vicinity of orchards sprayed with the above mixture.

While the writer does believe that finely divided sulphur is one of the active insecticidal agents in the wash, though just how it acts is not known, he is inclined to doubt very much whether this oxidation of the sulphur alone would be rapid enough to be of great value. The following points are against this theory:

- (1) If the action were at all considerable, it would be expected that the total sulphur on the tree would decrease, since not all the sulphur dioxid formed would be likely to be absorbed by the calcium hydroxid or calcium carbonate present, these being only mechanically mixed with the sulphur. In the "paper experiments," which to be sure are artificial, no loss of sulphur was shown after four weeks.

- (2) It would be expected that the free sulphur would decrease during the course of four weeks by conversion to sulphur dioxid;

instead of this, it increases to a slightly greater extent than corresponds to the amount of sulphur formed from the breaking up of thiosulphate, according to the following equation :



(3) In regard to the odor resembling that of sulphur dioxide observed by Mr. Pough, those who have sublimed sulphur know that during sublimation this odor is very noticeable, so that the odor noticed in the vicinity of orchards on a hot sunny day may be due to subliming sulphur.

On the whole, while it is believed that some of the finely divided sulphur is oxidized, it seems doubtful whether enough is oxidized to make this factor a major one in determining the efficiency of the wash. It seems more probable that the combined action of all the sulphur compounds present, exclusive of the sulphate, gives to the wash its value.

THE LIME-SULPHUR-SALT-SODA WASH.

Having completed the study of the lime-sulphur-salt wash and the lime-sulphur wash prepared by various formulas and under different conditions, experiments were next undertaken along similar lines with the lime-sulphur-salt-soda and the lime-sulphur-soda washes. These washes have been suggested as substitutes for the older wash, without the soda, since it is said they can be prepared without any or with a minimum amount of boiling, thus saving the farmer much time and trouble.

LIME-SULPHUR-SALT-SODA WASH PREPARED WITHOUT EXTERNAL HEAT.

The first experiment was to determine the composition of a lime-sulphur-salt-soda wash prepared without external heat and compare it with that of a lime-sulphur-salt wash containing the same amounts of lime, sulphur, salt, and water, but boiled until the maximum amount of sulphur was dissolved. The following formulas and methods of procedure were followed, using chemically pure reagents:

For the lime-sulphur-salt-soda wash 30 pounds of lime, 20 pounds of sulphur, 15 pounds of salt, 10 pounds of caustic soda, and 60 gallons of water were used, and for the lime-sulphur-salt wash the same formula was employed exclusive of the caustic soda. The sulphur was made into a thin paste with 9 quarts of hot water, the lime slaked with 9 gallons of hot water, and the sulphur paste added to it. Then the caustic soda was stirred in and the mixture

boiled of itself for a considerable period. Salt was then added and the requisite amount of water to make up 60 gallons plus the space occupied by the solids, as determined by previous tests in the experiments with the lime-sulphur-salt wash. The lime-sulphur-salt wash was prepared by simply boiling the constituents together and making up to volume as in the previous experiments. The results given in Table XIX were obtained:

TABLE XIX.—*Lime and sulphur in 100 cc of the lime-sulphur-salt-soda wash.**

Constituents.	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium oxid.	Total calcium oxid.
	Grams.	Grams.	Grams.	Grams.	Grams.	Grams.
Lime-sulphur-salt-soda.....	3.25	0.64	3.89	0.73	4.82	5.55
Lime-sulphur-salt.....	3.75	0.14	3.89	2.13	3.42	5.55

* The various sulphur compounds present in this mixture were not determined.

It is evident from these data that all of the sulphur is not dissolved by the heat generated by the caustic soda, and, further, that the sulphur that does go into solution does so to a great extent as the sodium, instead of the calcium, salts of the sulphur acids, thus causing a smaller amount of calcium oxid to be dissolved and a larger amount to remain as a residue than in the case of the lime-sulphur-salt mixture.

LIME-SULPHUR-SALT-SODA WASH PREPARED BY HEATING FOR A SHORT PERIOD.

Since the preceding experiment showed that the method of preparation of the lime-sulphur-salt-soda wash, without the aid of heat, did not dissolve all the sulphur, another experiment was made to determine whether the maximum amount of sulphur would be dissolved by heating for a very short period. The following results were obtained using chemically pure reagents, the same formulas as in the preceding case, and a 20-minute period of heating, that being the time necessary to bring the mixture from room temperature up to the boiling point.

TABLE XX.—*Lime and sulphur in 100 cc of the wash prepared with 20 minutes' heating.*

Constituents.	Time of heating.	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium.	Total calcium.
	Minutes.	Grams.	Grams.	Grams.	Grams.	Grams.	Grams.
Lime-sulphur-salt-soda*....	20	3.79	0.10	3.89	0.75	4.80	5.55
Lime-sulphur-salt†.....	60	3.75	.14	3.89	2.13	3.42	5.55

TABLE XXI.—*Sulphur compounds in 100 cc of the liquid portion of the wash prepared with 20 minutes' heating.*

Constituents.	Sulphur as thiosul- phates.	Sulphur as sulphids and poly- sulphids.	Sulphur as sulphates and sul- phites.	Total sulphur.
	Grams.	Grams.	Grams.	Grams.
Lime-sulphur-salt-soda*.....	0.88	3.04	0.005	3.925
Lime-salt-sulphur†.....	.84	2.91	.010	3.760

* Twenty minutes to bring to boil.

† Sixty minutes' boiling.

The following facts are indicated by Tables XX and XXI: (1) Practically all of the sulphur goes into solution in the lime-sulphur-salt-soda wash when it is heated for 20 minutes. (2) This treatment seems to dissolve a little more sulphur than by boiling with lime and salt for one hour. (3) The liquid portion of the lime-sulphur-salt-soda wash prepared as above contains the same sulphur acids in nearly the same amounts as the lime-sulphur-salt mixture, the only difference being that the sulphur compounds are present to a large extent as the sodium, instead of the calcium, salts. (4) More residual calcium oxid is present in the lime-sulphur-salt-soda wash than in the lime-sulphur-salt wash. (5) The former wash should be more caustic than the latter, both on account of the caustic soda present and also because of the greater excess of lime.

LIME-SULPHUR-SODA WASHES PREPARED WITHOUT EXTERNAL HEAT AND BY ADDING CONSTITUENTS IN DIFFERENT ORDERS.

The next experiment was for the purpose of determining how much sulphur goes into solution when high grade *commercial* sulphur, stone lime, and caustic soda are used instead of the chemically pure articles, and what influence the order in which these ingredients are added has on the composition of the wash. For this purpose a wash was first prepared according to the following formula: Lime, 30 pounds; sulphur, 15 pounds; water, 50 gallons, boiling for one hour and using high grade commercial ingredients. This wash was used as the standard and another wash was prepared, using the same amount of ingredients with the addition of 6 pounds of caustic soda to generate the heat and form a good medium for dissolving the sulphur. The following procedure was followed in the preparation of the second wash: The sulphur was made into a thin paste with hot water and added to the slaking lime. When the lime had ceased to slake, the full amount of caustic soda was added and the mixture stirred for 15 minutes. Water was

then added to make up to 50 gallons plus the space occupied by the solid reagents. This wash is designated as experiment 2.

In another sample of wash the same formula was used, but the order in which the ingredients were added was different, i. e., the sulphur was made in the form of a thin paste with hot water and the total caustic soda then added. The mixture was stirred for 15 minutes and the lime added and allowed to slake; water was then added to make up to 50 gallons plus the space occupied by the solid reagents. The mixture so made is designated as experiment 3.

The following results were obtained with these three washes:

TABLE XXII.—*Lime and sulphur in 100 cc of washes differently prepared.*

Number of experiment.	Ingredients.	Sulphur in solution.	Residual and volatile sulphur.	Total sulphur.	Calcium oxid in solution.	Residual calcium.	Total calcium.
		<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
1	Lime-sulphur.....	3.16	0.24	3.40	1.74	5.06	6.80
2	Lime-sulphur-soda.....	2.27	1.13	3.40	.24	6.56	6.80
3	Sulphur-soda-lime.....	2.80	.60	3.40	.43	6.37	6.80

TABLE XXIII.—*Sulphur compounds in 100 cc of the liquid portions of washes differently prepared.*

Number of experiment.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphates and sulphites.	sulphur. sulphur.
	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>	<i>Grams.</i>
1	0.71	2.50	0.03	3.24
2	.41	1.91	.02	2.34
3	.47	2.37	.02	2.86

From these tables it is evident that high grade commercial samples of lime, sulphur, and soda, when used to prepare the lime-sulphur-soda wash, act practically the same as the chemically pure articles, resulting in the formation of a mixture containing about the same relative quantities of soluble sulphur compounds, though the amounts are decidedly smaller than those dissolved by boiling. Further, a better wash, i. e., one containing more sulphur in solution, is obtained by adding the ingredients in the order—sulphur, caustic soda, lime—than by mixing in the following order—lime, sulphur, caustic soda.

COMPARISON OF THE LIME-SULPHUR-SODA AND THE SULPHUR-SODA WASHES PREPARED WITHOUT EXTERNAL HEAT.

A comparison was next made of the composition of two washes, the first of which was prepared according to the following formula: Lime 30 pounds, sulphur 15 pounds, water 50 gallons, caustic soda 6 pounds, adding the constituents in the order—sulphur, caustic soda, lime—just as described in the preceding experiment. The second of the washes was prepared in the same way and by the same formula except that no lime was used. To make the comparison it was only necessary to examine the liquid portions of the washes. The following results were obtained, using high grade commercial ingredients:

TABLE XXIV.—*Sulphur compounds in 100 cc of the liquid portion of two washes prepared without external heat.*

Ingredients.	Sulphur as thiosulphates.	Sulphur as sulphids and polysulphids.	Sulphur as sulphites and sulphates.	Total sulphur.
	Grams.	Grams.	Grams.	Grams.
Lime-sulphur-soda.....	0.47	2.37	0.02	2.86
Sulphur-soda.....	.35	1.59	.03	1.97

From this study it will be seen that more sulphur goes in solution in the lime-sulphur-soda wash prepared as above than when the same amounts of sulphur and soda are used, but no lime; also that the sulphur-soda wash contains the same sulphur acids as the lime-sulphur-salt and the lime-sulphur-soda mixtures, the only difference being that a smaller amount of the sulphur is dissolved than in either of the above-named washes, and that the sulphur acids are present only as sodium salts instead of wholly or partially as calcium salts.

DECOMPOSITION OF THE LIME-SULPHUR-SALT-SODA WASH ON TREES.

A study was next made of the decomposition of the lime-sulphur-salt-soda wash along the same lines that were followed for the lime-sulphur-salt wash. For this purpose a wash of the following formula was used: Lime 30 pounds, sulphur 20 pounds, salt 15 pounds, caustic soda 10 pounds, and water 60 gallons. The mixture was heated 20 minutes to dissolve all of the sulphur. When finally prepared the sulphur compounds in the liquid portion of the wash were found to be as follows, chemically pure reagents being used:

	Grams per 100 cc.
Sulphur as thiosulphates	0.88
Sulphur as polysulphids and sulphids.....	3.04
Sulphur as sulphates and sulphites.....	.005
Total sulphur	3.925

Portions of this wash were dried on filter paper, as already described under decomposition of the lime-sulphur-salt wash, and analyses of the same were made from time to time, with the following results:

TABLE XXV.—*Composition of the lime-sulphpr-salt-soda wash after drying.*

[Expressed in grams per 100 cc of solution.]

Time of standing.	Free sulphur.	Sulphur as thiosul- phates.	Sulphur as sulphites.	Sulphur as sulphates.	Total sulphur.
<i>Days.</i>					
9*.....	1.57	2.27	0.02	0.00	3.86
28*.....	1.64	2.14	.06	.02	3.86
12*.....	1.64	2.19	.04	.01	3.88
27†.....	1.74	1.88	.10	.02	3.74

* Not watered to represent dew.

† Watered to represent dew.

From these data it is evident that the lime-sulphur-salt-soda wash decomposes in the same manner as the lime-sulphur-salt wash except that the rate of decomposition is much slower. Such being the case, it would appear, on purely chemical grounds, that the wash with caustic soda added ought to give just as good results as the original lime-sulphur-salt wash, if prepared so as to contain a like amount of sulphur. In fact, better results might be expected, since the sodium hydroxid is more caustic than the lime and would therefore tend to loosen the scale better, so that the other ingredients of the wash could act more thoroughly. However, two points must be taken into consideration: (1) the sodium sulphite, which is slowly formed, is more soluble than calcium sulphite, so that in a damp climate it would be washed off more easily; (2) that the rate of decomposition of the lime-sulphur-salt-soda wash is slower than that of the lime-sulphur-salt wash, and therefore it is possible that such decomposition might not take place rapidly enough to make it as efficacious as the old wash, assuming, of course, that the products formed by the gradual and slow decomposition have insecticidal properties. In expressing the above opinions the writer does so purely on the analytical data obtained in these studies, and of

course recognizes that field experiments are necessary to establish the truth or falsity of these conjectures.

PROPOSED NEW WASHES.

In the lime-sulphur-salt-soda wash the author is unable to see that anything is gained by the addition of salt, although it is recognized that some hold strenuously to the belief that the wash without it is a failure. Besides this it would appear that the caustic soda entirely takes the place of the lime, in so far as the caustic action of the wash on the scale is concerned. This is especially true in a dry climate where the caustic soda, which is much more soluble than the calcium hydroxid, is not washed off of the tree by rains. Therefore a wash composed only of sulphur, caustic soda, and water seems worthy of trial in combating scale insects. Such a wash should, of course, have approximately the same sulphur strength as the old lime-sulphur-salt wash and should require absolutely no heating to get the sulphur into solution. After a number of trials of different relative proportions of caustic soda, sulphur, and water it was found that if the formula as given below be used a mixture will be formed having in solution approximately the same amount of sulphur and the same sulphur compounds as the original lime-sulphur-salt wash, with the exception that these sulphur compounds exist entirely as the sodium salts instead of being present chiefly as calcium salts.

*Proposed Formula.**

Water	gallons..	50
Powdered sulphur	pounds..	19
Caustic soda	pounds..	10

The wash is mixed as follows: Make a paste of the sulphur with not more than $5\frac{1}{2}$ gallons of boiling water; at once add all the caustic soda, which has previously been broken up into pieces the size of a hickory nut or smaller, and stir occasionally for one-half hour. At the end of this time add $44\frac{1}{2}$ gallons of water, stir, and the wash is ready for use.

An analysis of the liquid portion of this wash for sulphur compounds shows the following composition:

	Grams per 100 cc.
Sulphur as thiosulphates	0.63
Sulphur as polysulphids and sulphids.....	2.85
Sulphur as sulphates and sulphites.....	.01
Total sulphur	3.49

* A wash somewhat similar to this has long been employed as a remedy for mites (sulphur 20 pounds, caustic soda, 98 per cent, 10 pounds, variously diluted), but not made according to the following directions nor with and understanding of its close chemical relationship to the lime-sulphur-salt wash.

It will be noted that this wash contains somewhat less sulphur than the original lime-sulphur-salt wash (formula—lime, 30 pounds; sulphur, 20 pounds; salt, 15 pounds; water, 60 gallons), but not enough to have any material influence. However, if others are of the opinion that it should be of exactly the same strength it can easily be made so by adding $39\frac{1}{2}$ gallons of water instead of $44\frac{1}{2}$ gallons of water, as given in the formula.

Again, it may be the opinion of many, and the opinion may prove to be correct, that it is best to add lime to this mixture, both on account of the fact that it serves as a guide in spraying and because it is less soluble in rain than caustic soda, and so will remain on the tree longer. If such is found to be the case the above formula could be used with the addition of about $17\frac{1}{2}$ pounds of slaked lime. The directions for preparing this wash would then read:

Make a paste of the sulphur with about $51\frac{1}{2}$ gallons of boiling water and add at once all the caustic soda, which has been previously broken up into pieces the size of a hickory nut or smaller, and stir occasionally for one-half hour, slake the lime with enough water to make a thick paste, and add the slaked lime to the mixture of sulphur, soda, and water. Add an amount of water equivalent to 50 gallons, minus the quantity already used in slaking the lime and making a paste of the sulphur.

Such a mixture as this is made in much the same way as one of the lime-sulphur-soda washes already described (p. 25), but different amounts of the ingredients are used and a slightly different procedure followed, which results in the solution of more sulphur and in the opinion of the writer produces a much better wash. It is believed, *on purely theoretical grounds and without having made field experiments*, that the first mixture proposed above, without lime, will give good results, especially in a dry climate. If this formula is deemed worthy of trial, reports as to its efficiency and the results obtained, as compared with those given by the lime-sulphur-salt wash, would be received with interest by the writer.

Some Insects Injurious to Forests

THE LOCUST BORER.

(*Cyrtene robiniae* Forst.)*

BY A. D. HOPKINS.

In Charge of Forest Insect Investigations.

OBJECT OF PAPER.

The object of this paper is to give a summary of the more important published information, supplemented by recently determined new facts relating to the locust borer and methods of controlling it, which will be of service to the investigator in the determination of additional facts, and to the owners of plantations and forests in suggesting methods of preventing losses.

ECONOMIC IMPORTANCE OF THE INSECT.

The economic importance of the well known locust borer as affecting the growth of the black locust or yellow locust (*Robinia pseudacacia*) is fully realized by everyone who is interested in this valuable forest and shade tree, and the urgent need of additional information on the subject is indicated by the frequent inquiries of correspondents and by the recent articles in newspapers, journals, and special publications which have been called forth by the proposed extensive commercial planting of the locust by railroad and other companies and by individuals.

INVESTIGATIONS.

In connection with the general study of insects injurious to forest trees, the locust borer has received considerable attention by the writer since 1890.† In March, 1905, a plan of cooperation between the Bureau of Entomology and the Forest Service in the investigation of insect enemies of the black locust was proposed and adopted, by which the subject is receiving special attention from the viewpoint of both the forester and the entomologist, with the primary object of practical results.

*Order Coleoptera, Family Cerambycidae.

†From 1890 to 1892 for the West Virginia Experiment Station, and since 1902 for the U. S. Department of Agriculture.

CHARACTER OF THE INSECT AND ITS WORK.

The locust borer is a whitish, elongate, so-called "round-headed" grub or larva (fig. 1), which hatches from an egg (fig. 2) deposited by a black or brown and yellow striped long-horned winged beetle (fig. 3) found on the trees and on the flowers of golden-rod from August to October. The eggs are deposited in the crevices of the

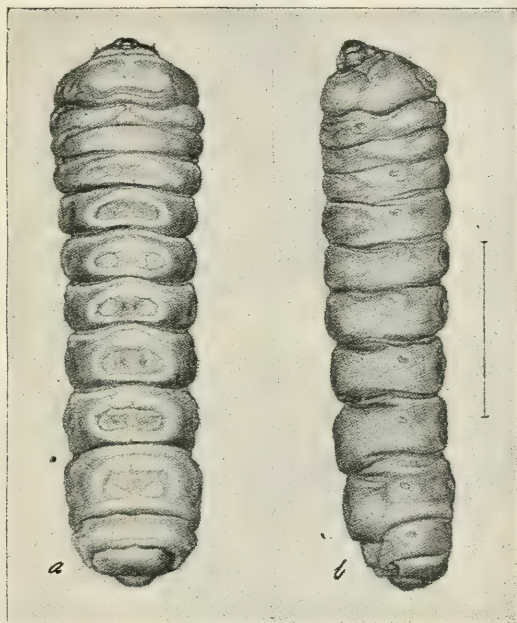
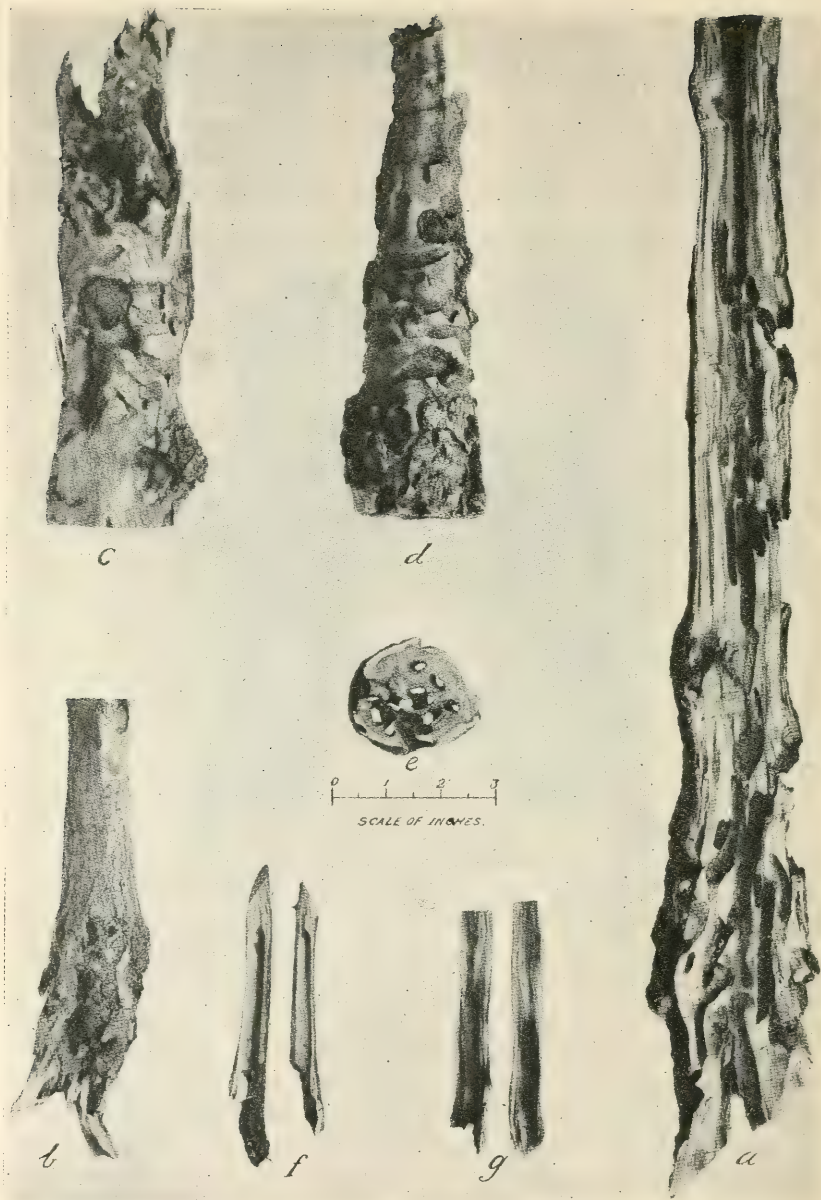


FIG. 1.—The locust borer (*Cyllene robinia*): a, larva, dorsal view; b, same, lateral view. Line at right represents natural length (original). The larva in profile should show minute prothoracic feet.

bark of living, growing trees from August to October, and the young borers (fig. 2, b, c) hatching therefrom mine into the outer portion of the living inner bark (fig. 5), where they pass the winter, and in the spring bore through the bark into the sapwood and heartwood. Here they transform in July and August to pupæ (fig. 4) and in August and September to adult beetles, which soon emerge from the trees and deposit eggs for the next annual generation of borers and beetles.

The injury to the trees (Pl. I) consists of wounds in the bark and sapwood which, if sufficiently severe or repeated year after year, result in either a stunted worthless growth or the death of young and old trees, while the numerous worm holes in the wood reduce its commercial value or render it worthless.



WORK OF THE LOCUST BORER.

a, Section of young tree 3 inches in diameter; *b*, section of young tree 2 inches in diameter, which was broken off near surface of ground; *c*, *d*, section of branch from badly damaged tree, showing healing wounds in surface of wood; *e*, transverse section of same; *f*, *g*, sections of branches one-half inch in diameter or less, showing in each the total length of burrow in which a larva developed and transformed to the adult beetle. (Original.)

The presence of the insect in injurious numbers is indicated (1) by the frequency of the adults on the golden-rod flowers and on the trees, from August to October; (2) by the slight flow of sap and by the brownish borings where the young larvæ are at work in the bark, during April and May; (3) by the whitish sawdust borings lodged in the rough bark, in the forks of the tree, and on the ground around the base of the trunk, during May, June and July; (4) by the breaking down of the branches and young trees, and by the sickly appearance of the young twigs and leaves in July and August.

This insect appears to be present and more or less injurious in all of that part of the United States which is east of the Great Plains and north of the Gulf States. Published information and reports of forest officials and others indicate that in Oklahoma and Indian Territory and west of the Great Plains the locust is now quite free from injury by the borer; but that these regions will remain exempt is by no means certain.

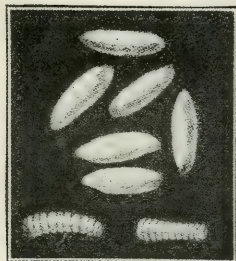


FIG. 2.—The locust borer (*Cyllene robinia*): a, eggs; b, c, larvæ from hibernation cells. Much enlarged (original).

EXTENT OF DAMAGE OR LOSS.

So extensive is the damage to natural growth, artificial plantations, and shade trees that in some sections within the natural range of the tree in the Eastern States, but particularly in the Middle West, where both the tree and the insect have been introduced, it is considered unprofitable to grow the tree for shade or timber, and in such sections the natural sprout growth is often considered a pest rather than otherwise.

The loss resulting from defective timber, stunted growth, and the death of trees is represented by the difference in value between the damaged growth or product and the same if uninjured and healthy. This, if expressed in dollars, would represent a large sum.

POSSIBILITIES OF PREVENTING LOSSES.

There are sections, especially in the natural home of the tree, where, as has been frequently observed by the writer and others, the damage is not sufficiently severe to seriously affect the vitality of the trees or the commercial value of the product; and our present knowledge of the insect and of methods of preventing losses from its ravages indicates that in properly selected localities, and under proper forestry methods of management, the tree, so far as this insect is concerned, can be grown successfully on an extensive scale, and can be made to yield most satisfactory returns.

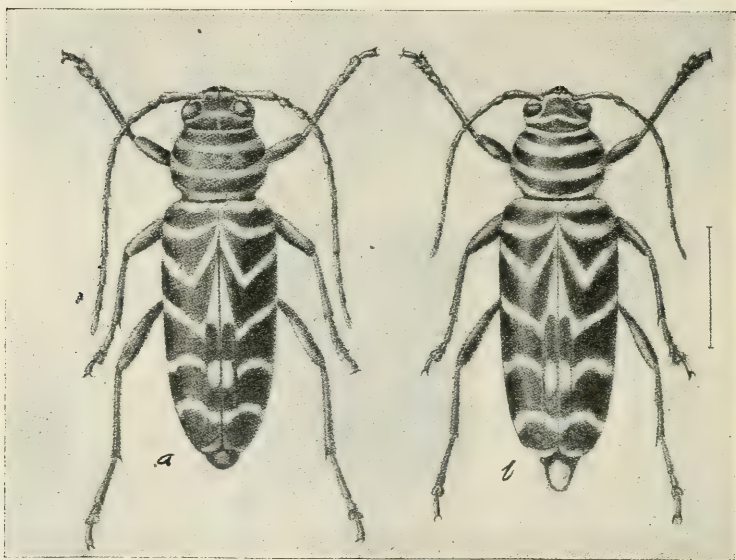


FIG. 3.—The locust borer (*Cyllene robiniae*): a, male beetle; b, female beetle. Much enlarged (original).

HISTORICAL REFERENCES.

The first reference to this insect, according to Fitch, is a figure and description by Pitiver in his *Gozophylacium*, published in London in 1702. Drury figured it in 1770, and the following year, 1771, Forster gave it the specific name of *robiniae*, under which it is at present recognized. It has been referred to many different genera, but is now recognized as belonging to the genus *Cyllene*. Both Drury and Forster received it from the "Province of New York," and referred to it as inhabiting the locust tree (*Robinia pseudacacia*). It is therefore evidently an American species.

Some of the principal writers who have contributed important

facts on the life history, habits, distribution, and remedies are: Dearborn, 1821; Harris, 1826-1841; Fitch, 1858-1863; Walsh, 1865-1867; Riley, 1867; Lintner, 1890; Schwartz, 1890; the writer, 1891-1898; Felt, 1901-1905; Cotton, 1905; White, 1906, and others. (See list of publications, p. 15.)

REVIEW OF PUBLISHED DATA.

Gen. H. A. S. Dearborn was the first to record the more important facts in the life history and habits of the insect. Indeed, so complete and accurate were his observations that comparatively little has been added by subsequent writers, who have extensively

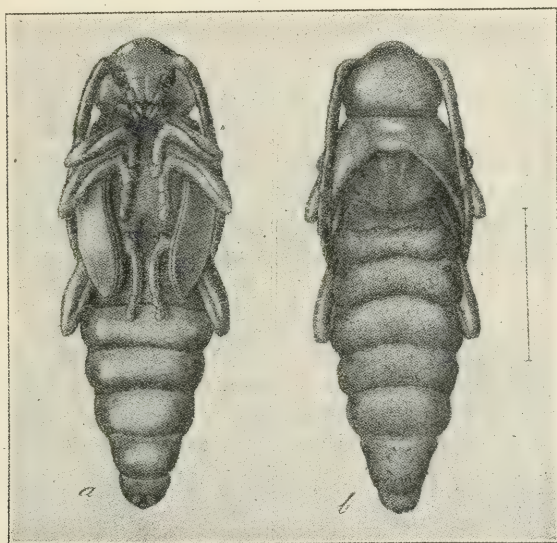


FIG. 4.—The locust borer (*Cyllene robiniae*): a, pupa, ventral view; b, same, dorsal view. Much enlarged (original).

quoted and repeated them. He found the beetles on the trunks of trees from the 1st to the 25th of September, the females depositing their "snow white" eggs in the crevices of the bark, four to nine in each place. These eggs hatched before cold weather, and "the young larvæ just buried themselves in the tender inner bark," where they remained until about the 1st of April, when they commenced boring, and soon passed into the solid wood. He stated that it could always be ascertained when and where the borers were at work by the oozing of sap from the wounds made by them. By the 20th of July the larvæ attained their full size, by the 28th some of them changed to pupæ, and the perfect insects were on the

trees September 3. These observations were made on his grounds near Roxbury, Mass., during several years previous to 1821, when they were reported in a letter to John Lowell, and published, together with an account of his unsuccessful experiments with whitewash, mortar, and plaster, in the Massachusetts Agricultural Journal, Volume VI, 1821, pages 270-275.

Col. T. Pickering, in a letter to Mr. Lowell the same year and published in the same volume, stated that there were trees in New Hampshire uninjured by the borer, as well as in some of the Southern States; that he had observed the stems of young trees in Washington, D. C., infested, while in Georgetown (D. C.) he saw large, thrifty trees uninjured; and he concluded that natural growth in groves was much less liable to injury than transplanted growth.

Fitch, writing in 1858, stated that numbers of specimens were sent to him year after year from Indian Territory.

Schwarz (1890) observed that in and around the District of Columbia the insect lives in large colonies, affecting all trees of small groves, while long hillsides full of locust are not infested.

R. S. Kellogg, in his discussion of forest plating in western Kansas, says:*

By locating plantation on good ground and giving it first-class care, the trees will reach fence-post size before the borers do much damage. They should then be cut and utilized. The rapid sprout growth will soon make a new crop. A stump sprout sometimes attains a height of 10 feet the first season. Handled in this manner, black locust can be profitably raised in many places where it is altogether unsuited for a permanent tree.

At present borers are a menace to black locust trees throughout western Kansas and Nebraska, though there are occasional local areas that are not affected. They have so far done little damage in southwestern Kansas, but they are moving both southward and westward. They are abundant at Pratt, Kinsley, Dodge, and Scott, and are appearing at Medicine Lodge, Coldwater, Meade, and Garden City. Yet of the numberless trees that have been killed or seriously injured nearly all reached a size that could well be used for posts or stakes before succumbing. This shows that black locust may be successfully grown in commercial plantations if cut as soon as large enough for posts. * * *

Just south of the Kansas line, in Woods County, Okla., black locust grows remarkably well, and has not yet been molested by borers.

Cotton (1905) observed that in Ohio injury was greater in single trees and plantations of considerable size than in natural forests.

Dearborn found that whitewashing the trees in April and filling the holes with mortar in July was not entirely successful as a reme-

*Bul. 52, Bur. Forestry, U. S. Dept. Agric., 1904.

dial measure, but he suggested cutting out and burning infested trees in April and protecting the young, thrifty trees. Harris suggested the collection of the beetles by children, and Fitch, the planting of golden-rod to attract the beetles, so that these could be collected and destroyed. Lintner suggested the application of soap solution and carbolic acid to prevent the beetles from depositing eggs, and the cutting out of young larvæ when their presence is indicated by sap and borings. Riley suggested destroying the young borers as soon as hatched. The writer recommended severe pruning in March, and clean culture was recommended by Felt.

The insect has been recorded from Canada southward to Pontchartrain, La., Texas, and Indian Territory, and westward into Nebraska. Some of the records of destructive ravages are the following: Peck (1818), Harris (1826), in New England; Fitch (1858), in New York; Rogers, Reed, and Bethune (1855 to 1867), in Canada; Walsh (1866), in Illinois and Kansas; Laurent (1893), around Philadelphia; the writer (1891 to 1898), in West Virginia; Smith (1898), in New Jersey; Cotton (1905), in Ohio; White (1906), in the Mississippi Valley, about twenty years after extensive planting was begun by settlers.

REVISION OF PUBLISHED DATA.

Some of the published records relating to the insect which have been frequently quoted or repeated require, according to the writer's observations, some amendments and corrections.

It would appear that normally but a single egg is deposited in a place, rather than clusters of four to nine. The female does not pierce the bark or place her eggs in the cambium layer. The larvæ do not enter the sapwood before winter, but, as observed by Dearborn and verified by the writer, remain in the outer portion of the inner bark. Records of the insect infesting honey locust are probably due to the fact that the black locust is sometimes referred to under this name, which is the correct one for an entirely different tree. It appears now that its attack is confined entirely to Robinia. It is not necessary that a tree or branch should be some inches in diameter before it is damaged, for the writer has found full-grown larvæ in sprouts and branches less than one-half inch in diameter.

In the writer's opinion, all attempts to cultivate locust in the eastern United States *should not be abandoned* on account of the borer, although this has been recommended by some recent writers. It has been stated that the locust would probably not be injured by the borer in the southern limit of its range and in the country

west of the Great Plains. While this may be true, precaution should be taken to prevent its introduction into such localities, since it is not improbable that if the insect be introduced and become established it may prove even more destructive there than in its natural home, as was demonstrated in the Mississippi Valley.

Nearly all methods heretofore recommended are subject to practical application to shade trees and small plantations only; therefore there is special need for suggestions of practical methods of combating the insect and preventing losses in large commercial plantations and in natural forest growth, and it is hoped that this paper will contribute something of value along this line.

OBSERVATIONS BY THE WRITER, 1890-1905.

Adults were collected on golden-rod flowers at Piedmont, Md., and Mineral County, W. Va., on August 25, 1890, and on golden-rod and locust leaves at Morgantown, W. Va., September 16 and 17, 1891. Young larvæ were found mining in living bark of trees at Kanawha Station, W. Va., May 1, 1891, and on May 20 the same larvæ had entered the wood, but a great many had died.

It was frequently noted that the locust in the forests of Chestnut Ridge in Monongalia and Pendleton counties, Laurel Hill in Preston County, and especially on Rich Mountain in Randolph County, W. Va., showed but slight damage by the borers. Similar observations were made in many other sections of the State, while in nearby and widely separated sections the damage was found to have been severe and continuous during the life of some of the older trees. In 1898 it was observed that badly damaged shade trees near Morgantown, W. Va., which had been severely pruned in March and April, had recovered, and the crowns were renewed by dense, vigorous, healthy growth, which suggested this method of treating badly damaged shade trees.

On October 9, 1904, it was found that the locust in the vicinity of Chevy Chase, Md., was but slightly damaged by the borer, although beetles were found in numbers on golden-rod and feeding on sap from wounds in bark of living sumac. This habit of feeding on sap is of special interest from the fact that it suggests the possibility of killing the beetles by means of a bait of some poisoned substance which would be attractive to them.

On May 23, 1905, it was found that the locust trees of all sizes in the open and in dense thickets along the old canal on Arlington Farm, Virginia, were thickly infested with the borers, which were

all in the wood and ranged in size from quite small to nearly full grown. The ground around some of the trees in the open and on the borders of the groves was found to be covered with the sawdust borings to the depth, in some cases, of an inch or more, and the larvæ could be distinctly heard at work in the wood. Some of the young trees had been literally honeycombed and were broken off at the ground, others had many branches broken and hanging by the bark or fallen from the tree, and some other trees had the leaves turning yellow and dying, while one isolated tree in a field had failed to put forth leaves on some of the branches. Some infested branches cut on this date and placed in a box in the laboratory were found on July 12 to contain fully matured adults, and on July 20 they began to emerge, thus showing that the larvæ will complete their development in the wood after it is cut from the tree and becomes perfectly dry. Indeed, this record shows that the dry condition contributes to the rapid development of the insect, for on the same day (July 20) on which the beetles were found in the box, the trees from which the branches had been cut were examined and found to contain nothing but larvæ. Some more branches were cut on this date and placed in a tin can, where they were kept moist. The first beetles emerged from these on August 24, or more than thirty days after adults had emerged from the dry branch. On August 30 many adults had emerged. September 20 ten living adults and many dead ones were taken from the can, and on October 2 several more dead ones were removed.

When the trees were examined on July 20, a larva was found mining in a two-year-old branch less than one-half inch in diameter, and the cocoon of a parasite of the borer was found in one of the mines, but the adult parasite was not reared. Many dead borers were found in their mines in the trunks and branches surrounded by a white powdery fungus.

The trees were again examined on September 14, when adults were found abundant on the foliage, branches, and stems, and also on flowers of golden-rod. Adults and pupæ were also found in considerable numbers in the dead wood of broken branches, as well as in the living wood, and dead larvæ were frequent. Larvæ of an elaterid (click beetle) were quite frequent in the wood, where they had evidently been feeding on the locust borer.

Examination during August, 1905, of the locust on a hill near Kanawha Station, W. Va., where this tree forms the principal growth over old abandoned fields and in the adjacent forests, showed that the damage by the borer was very slight in trees of all

sizes. On August 26 many adults and a very few pupæ, but no larvæ, were found in small trees in the valley, while the large trees in the same locality were but slightly damaged.

OBSERVATIONS BY MEMBERS OF THE FOREST SERVICE.

The following notes by Mr. S. N. Spring, forest assistant in the Forest Service, were submitted October, 1905, as a contribution to the results of cooperative studies. Early in July the work of the borer was noticed in the central portion of Westmoreland County, Pa. The first adult insect was seen on August 29. Evidence of the work of this insect was found in the localities investigated, but, for the most part, it was not serious enough to prevent the planting of locust for fence posts. To the north and west of Greensburg, in Westmoreland County, and in Allegheny County many roadside trees were badly bored. The work of the borer is slight on Chestnut Ridge and Laurel Hill, where locust thrives. Posts and pit props cut in these mountains show slight injury only. In the few places where injury was found to be great, within the area studied, the trees were dying, and many branches were broken off where the trees had been extensively bored by this insect. Owing to the fact that places of serious injury were so few, it was impossible to carry out any observations that would be of value in a study of immunity. In general the locust on the two high ridges thrived better than those on the lower elevation of Westmoreland and Fayette counties, and less injury due to this insect was found among the trees on the ridges.

Mr. J. W. Fetherolf, of the Forest Service, informed the writer, on January 26, 1905, that a grove of black locust planted in Salt Lake City, Utah, prior to 1850, is still in a thrifty condition and apparently free from all insect injury. The same can be said about this species seen elsewhere in the Salt Lake Valley.

Mr. Wesley Bradfield, of the Forest Service, informed the writer that he found the adult beetles common on badly damaged trees, 5 to 8 years old, near Marshall, Mich., in August, 1905; also, that according to his observation the locust in the southern quarter of Michigan was seriously damaged, while in the northern three-quarters, especially toward Lake Michigan, it was not.

RECENT OBSERVATIONS BY THE WRITER.

On March 11, 1906, it was found at Arlington Farm, Virginia, that the young larvæ had passed the winter in minute cells which they had excavated in the outer layers of the living bark, and just

beneath the outer corky bark (fig. 5), as recorded by Dearborn. So common were these hibernating larvæ in the trees that in the bark of some of them there were fifteen or twenty within an area of a few square inches; but of the several hundred examined there was only one larva in a place, which would indicate that the eggs are not deposited in clusters, but that they are scattered about in the

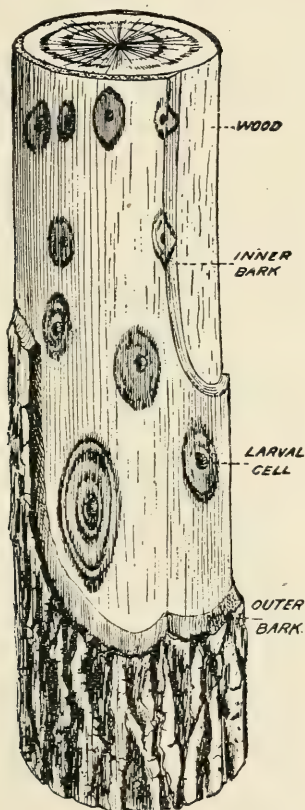


FIG. 5.—The locust borer (*Cyrtene robiniae*): Hibernation or larval cells in outer portion of living inner bark. About natural size (original).

crevices, so that each larva occupies a separate hibernating cell. The slight wound thus produced in the outer layer of the living bark results in a small dead area surrounding the cell. This dead and brown condition was found, on the date mentioned, to have penetrated the thick inner bark to the wood. This condition evidently facilitates the operation of the young larva in boring

through the inner bark to the wood, which a healthy condition of the immediately surrounding bark might prevent. It is not improbable that this small area of dead bark may be caused by a plant disease, which finds its way to the living plant tissue through the slight wound made by the larvæ and which, if this be so, may contribute greatly to the death of badly infested trees.

The young larvæ were found in nearly every case in the part of

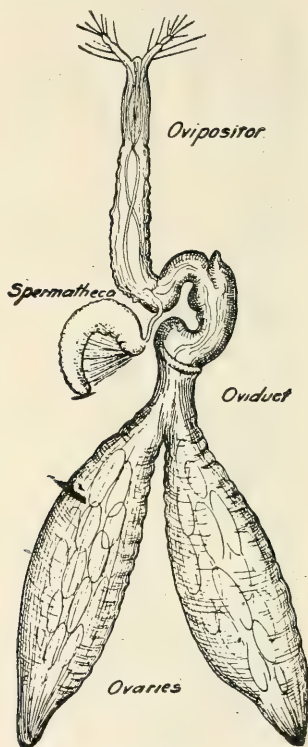


FIG. 6.—The locust borer (*Cylleus robiniae*) Reproductive organs of female beetle. Highly magnified (original).

the bark which had not been injured previously, thus indicating that the female deposits her eggs where the bark is perfectly healthy and not in or around the old scars. Indeed, the habit of the larvæ appears to render this quite necessary for their more or less isolated work. It was particularly noted that the remaining unaffected bark of the trees which had suffered most from previous generations of the insect was thickly infested with hibernating

larvæ, while that of near-by large trees which had escaped previous injury contained very few, thus indicating that from some cause there are individual trees which are more or less immune. This fact, which has been so often observed, suggests the importance of experiments in the propagation of immune stock by means of seed or root cuttings from immune trees growing among badly infested ones.

The hibernating habits of the larvæ also suggest a simple method of destroying them, namely, the cutting and barking of the trees during the period between the first of November and the first of May. The simple removal of the bark, without burning, is sufficient to kill the larvæ.

It should be remembered that all the holes found in a tree and all other damage by the borer are not the work of one generation, but usually that of repeated annual attack during the life of the tree; also, that a burrow in the sapwood of a young tree remains the same burrow in the heartwood of the old tree, without change, except in the healing of the original entrance; therefore the number of borers and the amount of damage each year is not so great as it might appear, and, while each female is doubtless capable of depositing more than a hundred eggs,* it would appear from the writer's observations that only a small percentage of the larvæ hatching from them survive the bark-infesting stage or complete their development to the adult stage. This suggests that any method of management which will insure the destruction of a large number of larvæ and beetles each year will reduce the damage to a point where there will be practically no loss.

SUGGESTIONS FOR CONTROLLING THE INSECT AND PREVENTING LOSSES.

With our present knowledge of the life history and habits of the locust borer, it would appear that the following suggestions might be of practical value in the control of insects in large plantations and forests.

The fact that the young larvæ from eggs deposited during the summer remain in the outer bark during the winter and do not enter the wood until the following May suggests that if locust for all purposes were cut between November and May, the bark removed from that portion which is of value, and the remainder burned, it would destroy vast numbers of the insects and contribute greatly toward the protection of the remaining growth.

* An examination of the ovaries (fig. 6) of beetles collected in August shows that they may contain as many as fifty mature eggs at one time, in addition to a large number of immature ones.

The fact that badly infested trees may be detected during May, June, and July by the ejected sap and borings, suggests this simple method of locating such trees, which should be cut close to the ground and burned, before the first of August, to destroy the borers before they transform to the adult beetles and emerge. If preferable, the same end may be accomplished by burning the tops and worthless parts and by submerging the valuable parts in ponds or streams until the borers are killed.

DAMAGE TO CUT WOOD AND DANGER OF INTRODUCTION INTO NEW LOCALITIES.

As we have shown that after the borers have once entered the wood they may complete their development in the cut and dry branches, they will evidently do so in posts or other material manufactured from trees cut between the first of May and the middle of September; therefore, it is plain that locust should not be cut during this period for any purpose except to destroy the borers, or, if it should be necessary to cut it, the tops should be burned and the logs submerged in ponds or streams for a few days before they are shipped or manufactured. This is very important both to prevent damage to the manufactured material and the introduction of the insect into the far West and other sections of the country which are at present free from it.

PROPER LOCATIONS FOR EXTENSIVE PLANTATIONS.

The fact that there are many sections and localities of greater or less extent within the natural home of the locust and its insect enemies where, from some unknown cause, the tree grows to large size and old age without perceptible injury from borers and other insects, suggests the importance of selecting such localities for any proposed extensive operations in the line of artificial plantation, or utilization of natural growth. It will be found, however, that no area of considerable extent, even in such localities, is entirely free from this and other destructive insect enemies, and that certain precautions and well-planned methods of management with reference to their control will be necessary.

PRELIMINARY REQUISITES.

In the first place it is necessary, in order to provide against future losses from the borer, that a thorough survey be made in May and June, not only of the area to be utilized but of the entire neighborhood for a radius of a mile or more from its borders, for the purpose of locating and destroying scattering trees and groves

which are more or less seriously infested or damaged by the borer. It would seem that the control of such large areas, by purchase or under a plan of cooperation between the owners of the land or trees, is one of the most important requisites for success in preventing future losses from the ravages of this and other insects in small as well as large plantations. In fact, it is the writer's opinion that, with this precaution properly and continuously carried out, locust may be successfully protected from the borer in any locality.

SUBSEQUENT MANAGEMENT.

In the subsequent management of plantations and of natural forest and sprout growth it is important each year to locate and destroy the worst infested trees for the purpose of killing the borers in the wood, and to conduct the thinning and commercial cutting operations during the period between November of one year and May of the next in order to destroy the eggs and young before they enter the wood.

Worthless, scrubby, borer-infested trees should be killed outright by stripping the bark from 4 or 5 feet of the lower stem during August to prevent sprouts and seed production from them and at the same time to destroy the eggs and young borers. Trees deadened in this manner, as was demonstrated near Morgantown, W. Va., some year ago, may be so completely killed that not a single root sprout will appear. Therefore this method is of special value in preventing sprout reproduction from inferior individual trees.

COLLECTING THE BEETLES FROM GOLDEN-ROD FLOWERS.

Collecting the beetles from golden-rod flowers, by means of insect sweep nets, before they deposit their eggs, would be advisable, even for the protection of large plantations, and, as has been suggested, the planting of patches of the plant, or the cutting of all but certain strips and patches of natural growth for this purpose, would serve to concentrate the beetles where they could be caught in the nets and destroyed by emptying them into a pail containing water covered with a film of kerosene.

POISONED BAIT.

Experiments should also be made with poisoned baits, as suggested on pages 7-8.

SUGGESTIONS FOR PROPAGATING BORER-RESISTANT TREES.

FROM SEED (SEXUAL METHOD).

The fact that some trees are, to a greater or less extent, immune from attack or injury by the borer, while adjacent ones in the same grove are attacked year after year and seriously damaged, suggested the idea of breeding races and varieties of the species which would be permanently immune. This suggestion was included in the plan for cooperative investigation mentioned on pages 1-2. It was then thought that if the seed for general planting were collected from immune trees found growing among badly damaged ones, a much larger percentage of the product would resist attack and, by continuing this method of selection and breeding, immune varieties could in time be established. There are, however, some serious difficulties to be overcome by this sexual method, especially that of cross-fertilization and variation and the very long time required to get definite verified results.

FROM ROOT CUTTINGS (ASEXUAL METHOD).

It has since occurred to the writer that insect-resistant varieties might be secured by a much shorter method, namely, that of propagating from root cuttings and possibly from twig cuttings. By this simple method of asexual propagation a large number of offspring, in every respect like the parent stock, may be secured at once for the starting of experiments to determine whether or not the asexual product of trees which have not been injured by the borer will produce plantations equally as immune. The writer's experience in the establishment of improved varieties of timothy by this method leads him to believe that insect-resistant varieties of locust can be established. If so, the principal difficulties in the problem of preventing losses from the ravages of the borer will be solved.

It should be mentioned in this connection, however, that it is possible that the borer, if deprived of the trees which are most attractive to it, may gradually adapt itself to the more resistant ones and become more or less injurious to these, and that other insect enemies may be troublesome. There will be so many advantages however, in propagating from healthy, vigorous stock that, in the writer's opinion, the matter should receive immediate attention, and selection and propagating experiments should be started at once. The success of the effort will depend largely on the proper selection of immune trees from the worst infested groves or sections rather than from those growing in partially immune localities.

Domestic animals and cultivated plants have been improved by selection and breeding to meet almost every need and requirement of man, and it is well known that some races and varieties are much less susceptible to injury by disease and enemies than are others. It is reasonably certain, therefore, that the locust will not be an exception, but that it will yield to the breeders' manipulations and may be made to produce insect-resistant varieties and forms specially fitted to supply the different needs of commercial planting, shade, and ornament.

In the meantime, much of immediate practical value and importance may be accomplished by following the suggestions herein contained for the direct control of the insect in extensive plantations and in natural forest growth.

Some Insects Injurious to Forests

ADDITIONAL DATA ON THE LOCUST BORER.

(*Cyllene robiniae* Forst.)*

BY A. D. HOPKINS.

In Charge of Forest Insect Investigations.

This part of Bulletin 58 contains a partial revision of Part I, with additional information based on the results of subsequent investigations by the writer and one of his assistants, Mr. W. F. Fiske.

SEASONAL HISTORY.

The data under this head refer to the District of Columbia and vicinity, latitude 39°, altitude 10 to 90 feet above tide.

HIBERNATION.

Hibernation begins soon after the larvæ hatch from eggs deposited at various times from August to October, and the period is passed as minute larvæ, scarcely longer than the eggs from which they hatch, in small individual hibernating cells excavated by them just beneath the corky bark and in the outer layers of the living bark on the main trunk of the larger to small trees or small saplings, and larger to small branches.

ACTIVITY OF THE OVERWINTERED LARVÆ.

Activity of the overwintered larvæ begins in April, or with the beginning of the movement of the sap in the bark and just before the leaf buds open. In 1906 activity began April 11; on April 13 the more advanced individuals had entered to the wood, on the 16th were grooving the surface, and on the 25th some of them had entered the wood. By May 11 nearly all of them had entered the sapwood and some of them had extended their burrows into the heartwood and were rapidly increasing in size and very active, so that by May 20 some of them were more than half grown. They continued actively feeding and growing until after the middle of

*Order Coleoptera, Family Cerambycidae.

July, when they began to transform to pupæ and continued transforming during August until all had transformed, probably by the 1st of September. The pupæ begin transforming to adults about the first of August and continue transforming probably into September, although the principal transformation is in August.

ACTIVITY OF THE ADULTS.

The adults begin to emerge as early as the 7th of August, and continue emerging until the last of September, the greater number coming out during the last part of August and the first half of September. Evidently all beetles are out by the first week in October.

The females begin to deposit eggs within a few hours after they emerge. The principal period of oviposition appears to be between the middle of August and middle of September, but oviposition continues until in October. The eggs hatch within eight or ten days after they are deposited, and the young larvæ excavate their hibernating cells and remain dormant until the following spring.

VARIATION IN SEASONAL HISTORY BETWEEN DIFFERENT LATITUDES AND ALTITUDES.

Phenological investigations of plants and insects by the writer* during the past ten years indicate that the average difference in the dates of occurrence of the different stages of *Cyllene robinia* at different latitudes and altitudes in the eastern United States will not be far from four days later for each degree north of latitude 39° and for each 400 feet of altitude above Washington at the same latitude, or four days earlier for each degree south of latitude 39° at the same altitude.

Thus, at latitude 43° in central New York, or central Michigan, with altitude the same as at Washington, the dates would be about sixteen days later, and at altitudes of 1,000 feet at latitude 43° they would be about twenty-six days later; at the same altitude as that of Washington at latitude 35° in southern North Carolina and Tennessee they would be about sixteen days earlier or at 1,600 feet elevation about the same. Thus we would have about thirty-two days' difference between localities at the same altitude in central New York and southern North Carolina. We would also have thirty-two days' difference between Washington and localities at latitude 39° and altitudes of 3,200 feet in the mountains of Virginia and West Virginia.

*Bull. 50, W. Va. Agric. Exp. Sta., 1898, pp. 17, 18, and Bul. 67, 1900, pp. 241-248, with map.

HABITS OF LARVÆ AND ADULTS.

When a larva begins activity in the spring it molts and proceeds to excavate an independent food and entrance burrow through the dead area of bark surrounding the hibernating cell or through the living bark immediately surrounding the dead area, until it reaches the cambium. It then excavates an irregular groove or cavity in the outer sapwood, returning frequently to the outer cell or opening to push out the borings and apparently to get relief from the exuding sap. A large per cent. of the larvæ die before any further progress is made, but survivors grow rapidly and soon succeed in overcoming the many obstacles, including natural enemies, resistance of the tree, etc., and enter the sapwood. From this stage on until the larvæ have attained their full growth they are very active and destructive. Their food consists principally of the nutritious substances of the bark and wood, and probably of the liquids flowing into the burrow, but they do not hesitate to kill and feed upon each other when two or more come in contact within the same burrow. The fact that the entire development often takes place in a burrow scarcely more than twice the length of a matured larva indicates that food must be obtained from some source other than the wood and bark. Throughout its active life the larva frequently returns to the inner and outer bark to enlarge the burrow, and push out its borings, so that the burrow when completed is of a diameter throughout sufficient to allow the passage back and forth of the full-grown larva. When full grown the larva enlarges the inner end of the burrow, plugs the outer portion with boring chips, and in due time transforms in succession to the pupa and adult. When the adult is fully matured it escapes through the exit prepared by the larva. Immediately after a female emerges she is joined by one or more males, and within a few hours, or within twenty-four hours, she proceeds to deposit eggs. She runs about over the bark investigating the crevices, by means of her ovipositor, to locate those most suitable for an egg. Sometimes as many as twenty places are critically examined before one is selected, and it appears that but one egg is deposited in a place by the same female, but other females may find the same place and each deposit an egg, so that sometimes several eggs are found in one crevice. As a rule, however, there is but one. The faculty of the female in locating the most suitable place for an egg by means of the sensitive palpi on the tip of the ovipositor is remarkable.

The beetles feed principally on pollen from the flowers of golden-

rod, but are very fond of any sweet liquid, such as sugar sirup placed on the trunks of the trees. They are found during the day on the trunks, branches and foliage of the locust, and during their principal period of activity, from toward the last of August to the middle of September, they are especially common on the golden-rod flowers. Mr. Fiske determined that they were also actively copulating and depositing eggs as late as 10 o'clock at night.

The attack of this insect is apparently confined to the black or yellow locust (*Robinia pseudacacia*).

ECONOMIC FEATURES.

DESTRUCTIVE CHARACTER OF THE WORK.

The destructive character of the work of the locust borer is a matter of great economic importance. This insect attacks the otherwise perfectly healthy trees, and in addition to causing the detrimental wormhole defects in the wood it often kills the trees or renders an otherwise valuable product worthless except for fuel. It is much more destructive in some localities and sections than in others, and also much more destructive to some trees in the same grove than it is to others. It is more destructive also to young saplings and the branches of medium-sized trees than to the larger trees.

The death of a tree is caused principally by injuries to the inner bark and cambium, resulting from repeated attacks. Injuries to the wood alone do not result in the death of trees except when all of the wood is practically destroyed or sufficiently injured to cause the tree to fall or be broken down by the wind.

The commercial value of the wood product is diminished or destroyed by the wormhole defects, but for certain purposes, as, for instance, fence posts, a limited number of such defects are not detrimental, except so far as they may contribute to decay.

EVIDENCES OF ATTACK.

The first evidence of attack is fine brownish boring dust and wet spots on the bark, first observed in April, when the overwintered larvæ begin to enter the inner bark. As soon as the larvæ begin to groove the surface of the wood and enter the sapwood, their presence, in addition to the wet spots, is indicated by yellowish boring dust mixed with liquids and the gum-like exudations. After all of the larvæ have entered the wood their presence is plainly shown by the quantities of yellowish boring dust lodged in the loose bark on

the trunk, in the forks of the tree or branches, and around the base. At this stage, usually about the middle of May, the badly infested trees which will die are plainly indicated by the failure of the leaf buds to open, or by the dwarfed or faded and sickly appearance of the foliage, and toward the last of the month and until the larvæ have completed their work in July, by the breaking down of the branches and small trees.

FAVORABLE AND UNFAVORABLE CONDITIONS FOR DESTRUCTIVE WORK.

Favorable conditions for the destructive work of the borer appear to be found in the presence of isolated trees and groves in the open in localities where golden-rod is present or abundant; also, where less resistant varieties of the tree prevail.

Unfavorable conditions are found in forest growth or large areas of pure stands, or mixed stands where the locust predominates; also, in plantations and groves where resistant varieties prevail, and where there is no golden-rod or other favorite food for the beetles. It is also found that coarse, thick bark is less favorable than the thinner bark on old and young trees and saplings.

NATURAL ENEMIES.

INSECTS.

Several predaceous insect enemies of the larvæ have been observed, but so far no true parasites have been discovered. A large elaterid larva (*Hemirhipus fascicularis* Fab.) appears to be the principal enemy of the borer after the latter has entered the wood. It resembles the borer somewhat, but is easily distinguished by the more flattened and shiny body, long prothoracic legs and two curved spines on the last abdominal segment. This predaceous larva is frequently found in the empty mines of the Cyllene larvæ, therefore it is evidently an enemy of considerable importance.

A slender, cylindrical, whitish, footless dipterous larva of an undetermined species is sometimes found in the mines in the wood, and, according to an observation made by Mr. Pergande, it may attack and kill the borers.

Whitish, flattened larvæ of the nitidulid genus *Ips*, with prominent branched hooks on the last abdominal segment, are common in the sap at the entrance of the mines and in the burrows made by the young borers in the inner bark and outer wood. They are supposed to be sap feeders, but the writer found they would attack and devour young Cyllene larvæ when confined together in a bottle. Therefore it is possible that they kill a great many of the young

borers before these enter the wood, which may account, in part, for the disappearance of such a large number of the young borers while in the bark-boring stage.

It was also demonstrated that if several young *Cyllene* larvæ of various sizes were placed together in a small vial, the larger ones would kill and eat the smaller ones. It is probable, therefore, that when several larvæ hatch from a cluster of eggs and but one survives—which is usually the case—the larger or stronger one has killed the weaker ones.

DISEASE AND SAP FLOW.

Dead larvæ are frequently found in the mines, covered with white flour-like spores, and sometimes these spores are so common that a perceptible cloud rises from the wood when it is split open. Experiments in placing some of the spores with healthy uninjured larvæ in bottles, as well as with those in the normal position in the wood, resulted in the death of the larvæ and the development of apparently the same disease, while the duplicate larvæ kept under the same conditions, but without contact with the spores, remained normal and healthy. Therefore this is a fungus which will kill the borers and one which is evidently of considerable importance.

The profuse flow of sap together with a gummy substance in the wounds made in the living bark and cambium is evidently detrimental to the normal progress of the young larvæ and apparently many of the latter are thus destroyed.

METHODS OF CONTROL.

It should be remembered that all the holes found in a tree and all other damage by the borer are not the work of one generation, but usually that of repeated annual attack during the life of the tree; also, that a burrow in the sapwood of a young tree remains the same burrow in the heartwood of the old tree, without change, as long as the tree exists, except in the healing of the original entrance. The number of borers and the annual amount of damage is not so great, therefore, as might appear, and, while each female is capable of depositing a hundred eggs, only a small percentage of the larvæ hatching from them survive the bark-infesting stage or complete their development to adults. This suggests that any method of management which will insure the destruction of a large per cent of the surviving larvæ and beetles each year will reduce the damage to a point where there will be practically no loss.

With our knowledge of the life history and habits of the insect it

is now possible to make definite recommendations and suggestions for its control. Some of those of immediate practical importance are as follows:

TIME TO CUT LOCUST TO DESTROY THE YOUNG LARVAE.

The cutting of locust for all purposes, including thinning operations and for private or commercial use, should be done during the period between the 1st of October and the 1st of April, the bark removed from the crude product, such as posts, poles, and the like, and the tops and thinnings burned. The removal of the bark from all desirable portions of the trunks of the trees felled during this period is important and necessary in order to destroy the larvæ before they enter the wood. The work in all cases should be completed before the leaf buds begin to swell on the living trees in the spring.

DESTRUCTION OF INFESTED TREES AND WOOD.

When it is desirable to simply remove and destroy, by burning or otherwise, the badly infested and damaged trees to kill the broods of larvæ, the work should be done in May and June, when all such trees can be easily recognized by the boring dust, fading leaves, broken branches, etc., and must be completed before the beetles begin to emerge. Perhaps the best rule, applicable to all localities, latitudes, and elevations, is to complete the work by the time the flowers have all fallen from the trees, which will vary between different altitudes and latitudes from about the middle of May to the last of June. Another rule would be to complete the work before the earliest varieties of golden-rod begin to show evidences of flowering. This, however, would be the latest that the work should be done, because the beetles begin to emerge by the time the first golden-rod flowers appear.

SPRAYING THE TRUNKS AND BRANCHES TO KILL THE YOUNG LARVAE.

Experiments have demonstrated that the hibernating larvæ may be killed by spraying the trunks and branches with a strong solution of kerosene emulsion. Therefore, when it is practicable or more desirable to adopt this method for the protection of small plantations, groves, or shade trees, the spraying should be done in the fall or winter, not earlier than November 1, and not later than April 1—in other words, during the dormant period of the tree. The following paragraphs, relative to the preparation of kerosene emulsion, are taken from Farmers' Bulletin No. 127, by C. L. Marlatt:

Kerosene emulsion (soap formula)—

Kerosene	gallons..	2
Whale-oil soap (or 1 quart soft soap)	pound..	$\frac{1}{2}$
Water	gallon..	1

The soap, first finely divided, is dissolved in the water by boiling and immediately added, boiling hot, away from the fire, to the kerosene. The whole mixture is then agitated violently while hot by being pumped back upon itself with a force pump and direct-discharge nozzle throwing a strong stream, preferably one-eighth inch in diameter. After from three to five minutes' pumping the emulsion should be perfect, and the mixture will have increased from one-third to one-half in bulk and assumed the consistency of cream. Well made, the emulsion will keep indefinitely, and should be diluted only as wanted for use.

For the treatment of large orchards or in municipal work requiring large quantities of the emulsion, it will be advisable to manufacture it with the aid of a steam or gasoline engine, as has been very successfully and economically done in several instances, all the work of heating, churning, etc., being accomplished by this means.

The use of whale-oil soap, especially if the emulsion is to be kept for any length of time, is strongly recommended, not only because the soap possesses considerable insecticide value itself, but because the emulsion made with it is more permanent, and does not lose its creamy consistency, and is always easily diluted, whereas with most of the other common soaps the mixtures becomes cheesy after a few days and needs reheating to mix with water. Soft soap answers very well, and 1 quart of it may be taken in lieu of the hard soaps.

In limestone regions, or where the water is very hard, some of the soap will combine with the lime or magnesia in the water and more or less of the oil will be freed, especially when the emulsion is diluted. Before use, such water should be broken with lye, or rain water employed. * * *

For use on locust trees dilute 1 gallon of emulsion with 2 gallons of soft water.

Pure kerosene and pure petroleum will effectually kill the insects, but may do some damage to the bark of the trees.

Experiments with carbolic emulsion indicate that this preparation is of no value to kill the young larvæ.

POISON BAIT.

Experiments showed that the beetles would feed readily on poisoned bait, such as sugar, sirup, or molasses with some arsenical mixed in, when this was smeared on the trees. Such baits are fatal to the beetles, but the danger of killing honeybees is so great that their use is not recommended in localities where honeybees are kept.

DAMAGE TO CUT WOOD AND DANGER OF INTRODUCING THE INSECT INTO NEW LOCALITIES.

We have determined that after the borers have once entered the wood they may complete their development in the cut and dry branches; they will evidently do so, therefore, in posts or other material manufactured from trees cut between the 1st of May and the middle of September; from this it is plain that locust should not be cut during this period for any purpose except to destroy the borers, or, if it should be necessary to cut it, the top should be burned and the logs submerged in ponds or streams for a few days before they are shipped or manufactured. This is very important, both to prevent damage to the manufactured material and the introduction of the insect into the far West and other sections of the country which are at present free from it.

SELECTION OF LOCATIONS FOR EXTENSIVE PLANTINGS.

The fact that there are many sections and localities of greater or less extent within the natural home of the locust and its insect enemies where, from some unknown cause, the tree grows to large size and old age without perceptible injury from borers and other insects, suggests the importance of selecting such localities for any proposed extensive operations in the line of artificial planting, or utilization of natural growth. It will be found, however, that no area of considerable extent, even in such localities, is entirely free from this and other destructive insect enemies, and that certain precautions and well-planned methods of management with reference to the control of the latter will be necessary.

MANAGEMENT OF PLANTATIONS TO PREVENT INJURY.

In the first place it is necessary, in order to provide against future losses from the borer, that a thorough survey be made in May and June, not only of the area to be utilized but of the entire neighborhood for a radius of a mile or more from its borders, for the purpose of locating and destroying scattering trees and groves which are more or less seriously infested or damaged by the borer. It would seem that the control of such large areas, by purchase or under a plan of cooperation between the owners of the land or trees, is one of the most important requisites for success in preventing future losses from the ravages of this and other insects in small as well as large plantations. In fact, it is the writer's opinion that, with this precaution properly and continuously carried out, locust may be successfully protected from the borer in any locality.

In the subsequent management of plantations and of natural forest and sprout growth it is important each year to locate and destroy the worst infested trees for the purpose of killing the borers in the wood, and to conduct the thinning and commercial cutting operations during the period between October of one year and April of the next, in order to destroy the young borers before they enter the wood.

Worthless, scrubby, borer-infested trees should be killed outright by stripping the bark from four or five feet of the lower stem during August to prevent sprouts and seed production from them, and at the same time to destroy the eggs and young borers. Trees deadened in this manner will usually be so completely killed that not a single root sprout will appear. Therefore this method is of special value in preventing sprout reproduction from inferior individual trees.

SELECTING AND BREEDING BORER-RESISTANT TREES.

The fact that some trees are more or less resistant to attack or injury by the borer, while adjacent ones in the same grove are attacked year after year and seriously damaged, suggests breeding races and varieties of the species which would be permanently resistant.

Breeding experiments have been begun in cooperation with the Bureau of Plant Industry and the Forest Service, but it will require several years to get definite results. In the meantime, however, it is important that seed and cuttings for commercial planting should be selected, as far as possible, from trees which show least damage from the borer and are otherwise vigorous and healthy. From a well-established principle in the heredity of plants and animals, this practice of propagating from the best examples must certainly yield better results than would follow a disregard of the character of the trees from which seed or root propagations are made.

For reference to literature, and other information not included in this paper, the reader is referred to Part I of this bulletin, pages 1 to 16.

Forest Planting Leaflet

HOW TO TRANSPLANT FOREST TREES.

The tree planter should endeavor always to transplant his trees with the least exposure of the roots. The root-hairs, or feeding cells, on the roots of a plant will shrivel up and perish if exposed to the dry atmosphere for even a few minutes. The roots of conifers are particularly sensitive, so that these require more careful attention in transplanting than do broadleaf trees. Some of the broadleaf species may have their roots dried out and shriveled, yet with proper attention revive and live; but the conifers, once dried, rarely regain their vitality.

THE PROPER SEASON.

The best time to transplant young trees is just before growth begins in the spring, when the seedlings are likely to receive the least injury. In general, planting should be done as soon as possible after the frost is out of the ground, the exact period depending upon local climate and soil conditions. In parts of the country where the winter is the only season with an abundant rainfall, the transplanting should be done during the rainy season.

Fall transplanting in the prairie States is usually unsatisfactory, since the dry, freezing weather of winter often damages the young shoots. In the States east of the Mississippi fall planting is more successful, though small seedlings are often likely to be heaved out by the frost if not protected by mulching.

Conifers, with the exception of the deciduous species, such as European larch and tamarack, may be safely planted somewhat later in the season than broadleaf trees.

It is always well to choose a wet or cloudy day for transplanting, but if the work must be done in dry weather, the nursery beds or trenches should be thoroughly soaked a few days before removing the trees. By establishing a home nursery close to the planting site the disadvantages of shipment may be avoided, some expense may be saved, and the time of planting may be considerably extended. The last point is often of importance, because it may be inconven-

ient to drop other work in order to give a shipment of trees the immediate attention they require. Home-grown stock may be left in the nursery until a favorable opportunity for getting out the trees occurs.

TREATMENT BEFORE TRANSPLANTING.

As a rule, seedlings from one to three years old are the best for forest plantations, and those of most species require no preliminary preparation. Older trees, however, and certain conifers like Coulter pine, western yellow pine, longleaf pine, and such broadleaf trees as form long taproots, should have their roots pruned in the seedbeds. This may be done late in the summer by running a "tree digger" under each row of trees and allowing the plants to stand undisturbed for another season, or, with small seedlings, the roots may be pruned with a sharp flat spade or a special implement designed for the purpose.

European foresters move young trees with balls of earth adhering to their roots, such trees being called "ball plants." Where the eucalyptus is cultivated on a large scale the seedlings are frequently prepared for easy transplanting by being grown in "flats" or seed boxes made of some durable wood. The plants may then be removed with a small block of earth attached to the roots.

When the trees to be moved are large they are often prepared by digging them partly out in the fall, so that a large ball of earth may be frozen to their roots. The block of frozen soil, with the tree in it, is moved during the winter season to a hole which was dug before the ground became frozen.

PUDDLING.

When a seedling or transplant is taken from the ground, its roots should immediately be plunged into a vessel containing a mixture of earth and water about as thick as cream. This mixture is known as "puddle," and is one of the most important requisites for successful tree planting.

The puddle may be prepared in a pail, tub, or barrel, according to the size and number of the trees to be transplanted, and may be carried or drawn along the rows where the digging is in progress. If the trees are to be planted immediately, the vessel holding the puddle may be used as a receptacle to carry them from the nursery to the planting sites.

HEELING IN.

If seedlings are received from a distance, the trees should be unpacked at once and their roots should be dipped into a puddle. After this the trees should be "heeled in" according to the following method until the time for planting in the field:

Dig a trench deep enough to bury the roots and part of the stems. The trench should run east and west, with its south bank at a slope of about 30 degrees to the surface of the ground. A layer of trees should be placed in the trench on its sloping side, the tops toward the south. The roots and stems should be covered with fresh earth dug from the second trench, in which a second layer of trees is put and covered in the same way. The digging of the parallel trenches is repeated and layers of trees are put in until all have been heeled in. (See fig. 1.)

In the case of conifers care should be taken not to bury the foliage, and either to choose a shady place for the young trees or to construct a shade over them with brush or laths.

TRANSPLANTING IN NURSERIES.

With most species, especially with conifers, where seeds are planted in beds, it is necessary to transplant a portion of the young seedlings to nursery rows when they are one or two years old. This stimulates the growth of small roots, makes the plants much more vigorous than others of the same age not transplanted, and helps them to establish themselves better when permanently set out.

When the seedlings are dug from the seedbed they should be dipped in a puddle and immediately be set in the nursery rows, or,

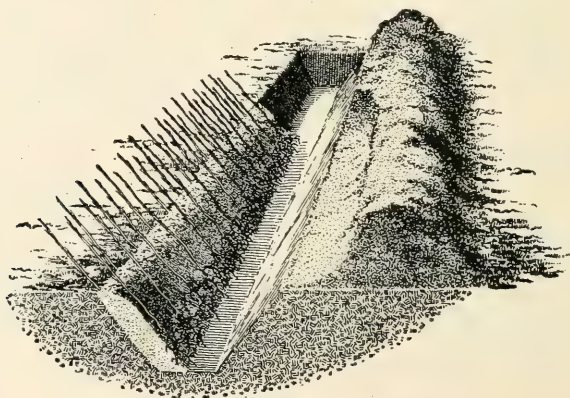


FIG. 1.—Heeling in young trees

if delay is necessary, they should be laid, roots together, in piles of a hundred or more, and the roots should be covered with wet blankets or with a few shovelfuls of fresh earth.

In ordinary nurseries which are to be cultivated by hand the rows for conifers should be 1 foot apart and those for broadleaf trees 2 feet apart. Coniferous seedlings should be set 4 inches apart in the row and broadleaf seedlings about 6 inches apart. All plants should be set from 1 to 2 inches deeper in the rows than they grew in the seedbed. If the seedbeds are not wanted for another planting, the seedlings to be transplanted may be taken out in such a way that thrifty plants will be left with the same intervals as in the nursery rows. They should then be cared for the same as transplants.

Some trees, like the oaks, the walnut, and the catalpa, form long, fleshy taproots during the first season, with few lateral roots. This form of root is sometimes very troublesome to transplant. Before setting such plants in the nursery rows from one-fourth to one third of the taproots should be cut off. A bundle of a hundred or more plants may be laid across a log and their taproots cut off with a sharp axe. Care must be taken not to bruise the part of the root that is left. Seedlings with a bunch of short, fibrous roots need no cutting.

Following the transplanting of seedlings the nursery rows should be kept clear of weeds and the soil stirred frequently with hoe or cultivator. It is especially necessary that the nursery be gone over after a rain as soon as the surface soil is dried out sufficiently to work well. This will prevent the deeper moisture from drying out about the roots of the trees. In case no rain falls within two weeks after the plants have been set in the nursery, water should be applied to the rows. In dry regions frequent shallow cultivation to maintain a dust mulch should be given.

TRANSPLANTING FROM NURSERY TO FIELD.

On the plains and prairies, the land, provided it has not been in a cultivated crop the preceding season, should be plowed deeply in the fall previous to planting and left rough over winter. In the spring it should be worked to a mellow condition and marked for planting in check rows or listed if the trees are to be planted in furrows. Virgin prairie soil should be allowed to lie one year after fall plowing in order that the dense sod may become thoroughly rotted. Subsequent treatment of such land is the same as that already described. In the east, and on non-arable ground, prelimi-

nary preparation of the soil by plowing and harrowing may be dispensed with.

In transplanting seedlings from the nursery to the permanent place in the field, the same care should be taken to prevent the exposure of their roots to the air as when transplanting them to the nursery rows. The best plan is to carry the trees, roots downward, in a pail containing several inches of water.

On land prepared by plowing and harrowing the seedlings may be set in furrows plowed for this purpose or in the rows previously marked with a lister for guidance of the planters. In the latter case a spade may be used for opening the hole. On unprepared sites the seedlings are set in holes dug with a grub hoe or mattock. The width and depth of the hole depends on the character and size of the plant's root system. In all tree planting it is of the greatest importance to press the earth firmly about the roots so that all air spaces are filled. The soil should not, however, be packed so hard as to be impervious to water nor should the earth be raised in a mound about the stem. In dry regions it is always desirable to leave a slight depression around the collar of the plant in order to collect any moisture that may fall.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

BUR OAK (*QUERCUS MACROCARPA*).

FORM AND SIZE.

The bur oak is one of the largest trees found in central North America. It frequently attains a height of from 80 to 90 feet and a diameter of from 3 to 4 feet. Under the most favorable conditions it has reached a height of 170 feet and a diameter of 7 feet. When grown free the crown is large and heavy; in the forest it is usually contracted and covers only the upper part of the tree.

The distinguishing feature of the bur oak is that from which it gets its name—the mossy fringe about the rim of its deep acorn cup. The leaf is large and deeply lobed and resembles that of the white oak. When the twigs are from three to four years old they begin to develop corky wings, which sometimes attain a width of an inch or more. These disappear as the branch grows older, and consequently are seen only on the younger growth.

RANGE.

The natural range of the bur oak is from Manitoba to Texas, and eastward to the Atlantic coast. It is commonest and most important in the lowland forests of the Mississippi basin, where it is found associated with white oak, basswood, white ash, cottonwood, black walnut, and several hickories. In the Dakotas and about the Great Lakes it sometimes occurs in pure stands, forming the characteristic "oak openings." East of the Allegheny Mountains it is comparatively rare and local, and near the northern and northwestern limits of its range it dwindles to a mere shrub. Bur oak may be planted on good soils almost anywhere east of the ninety-eighth meridian and in favorable situations somewhat farther west.

SILVICAL QUALITIES.

The bur oak is best suited to deep, rich, river-bottom soils. It will maintain itself in poorer upland localities, but it is recommended for planting only where the soil is fairly good, moist, and well-drained, and where protracted droughts are infrequent. It is rather intolerant of shade, and will not thrive beneath the crowns of taller trees.

The rate of growth, except under the best conditions, is somewhat slow, and is about like that of white oak. Neither grows so rapidly as red oak. The bur oak is subject to comparatively few pests or diseases.

ECONOMIC USES.

The bur oak is one of the most valuable hardwood trees in North America. The wood is heavy, hard, very strong, and durable. In the markets it is not, and need not be, distinguished from white oak, and it is used for the same purposes. The heartwood makes especially good fence posts and railroad ties, but the sapwood does not last long in the ground.

The tree is highly desirable for planting about the home, as well as for general forest planting where quick growth is not important.

METHODS OF PROPAGATION.

The bur oak reproduces freely both by acorns and by stump sprouts. The acorns, like those of all the white oaks, mature in one season, and germinate soon after falling, unless they are collected and cared for. They should therefore be planted, if possible, in the fall, either in seed beds or in their final place. Mice and squirrels

are fond of acorns, and sometimes destroy plantations made in the fall. Where this is to be feared, or where for any other reason it is necessary to hold them over until spring, the acorns may be stored between layers of moist sand.

To secure vigorous sprouts the trees should be felled between November and March, and the stumps should be cut low and left smooth and slanting on top. Sprouts then start close to the ground, where they can soon develop root systems of their own and become self-supporting. The slanting stump causes the rain water to run off, and thus helps to prevent rapid decay.

The bur oak has one well-developed taproot, and, in moderately rich and moist soils, many spreading secondary roots close to the surface. In dry soils the roots seek moisture at considerable depth.

PLANTING.

It is usually advisable to plant acorns in their permanent place in the field, for, like all oaks, the bur oak is not easy to transplant when once fairly established, because of its stout taproot.

Where the area to be seeded can not be plowed, the acorns should generally be planted in holes about 4 feet apart each way, although the proper distance will depend to some extent upon local conditions. Three or four acorns should be placed in each hole and covered with about $1\frac{1}{2}$ inches of earth. If the planting is done on plow land, the soil may be prepared as for any field crop.

Bur oak can be grown in pure stands, but it is often desirable to mix one or two slower-growing species with it, in order to force the trees to grow tall and to clear the stems of their lower branches.

Bur oak should not be planted with trees which grow very rapidly, nor where the climate is so dry that the soil needs much cultivation to preserve its moisture. Care should be taken to keep the little trees from being smothered by grass and weeds, to keep out stock and fire, and to let the plantation acquire the character of a forest as soon as it can. Weeds and litter on the ground, and shrubs that stand below the crowns of the trees, are good and should not be interfered with.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

RED OAK (*QUERCUS RUBRA*).

FORM AND SIZE.

The red oak is one of the largest trees in the forests of the Northern States. The average height of mature trees is from 70 to 90 feet, and the diameter from 2 to 4 feet. Under the most favorable conditions a height of 150 feet and a diameter of 5 feet is attained. When grown free the tree has a broad and symmetrical crown and a short stem; in the forest it is tall and straight, with a small, narrow crown. On loose soil the base is often enlarged or buttressed.

RANGE.

The natural range of the red oak is from Nova Scotia to west of Lake Superior and south to eastern Kansas and northern Georgia. It is very common and well developed in the Northern and Central States, where it usually is associated with other oaks, basswood, elms, chestnut, and hickories. Toward the extreme limits of its range it becomes rare and of small size.

Red oak is recommended for planting anywhere within the limits of its natural range, on soils of medium quality, and on those which have become exhausted by cultivation.

SILVICAL QUALITIES.

Red oak is best suited to porous sandy or gravelly clay soils. In this requirement it is intermediate between the white oaks and several of the black oak group. It requires well-drained soil always, but does not do well where the air is very dry.

The tree is intolerant of shade, except when very young, and must always be allowed to keep its crown free.

Red oak surpasses all other oaks in the rapidity of its growth, and is therefore a good tree to plant where conditions are suitable.

Like the other oaks, this species is not subject to disease, nor to serious insect attacks, and is rarely overthrown by wind.

ECONOMIC USES.

The wood of red oak is heavy, hard, coarse-grained, strong, and moderately durable. It is inferior to white oak where great strength is required, and does not last so long in the ground, but it works easier, and is often preferred for interior finish and for cabinet work. Good red oak is often sold as white oak, and for most purposes the two need not be distinguished. Ordinarily it is distinctly better than other species of the red oak group.

METHODS OF PROPAGATION.

The red oak reproduces freely both by acorns and by stump sprouts. The acorns require two years to reach maturity. They are quite bitter and are not relished by squirrels, and hence can be planted in the field with less risk than white oak acorns.

To secure vigorous sprouts, the trees should be felled between November and March; the stumps should be cut low and left smooth and slanting on top. Sprouts then start close to the ground, where they can soon develop root systems of their own and become self-supporting. The slanting stump causes the rain water to run off, and thus helps to prevent rapid decay.

Red oak develops a taproot, which in loose soil grows strong and penetrates to a considerable depth, but in shallow soil may be replaced by strong secondary roots.

PLANTING.

It is usually advisable to plant acorns in their permanent place in the field, for, like all oaks, the red oak is not easy to transplant when once fairly established, because of its stout taproot.

Where the area to be seeded can not be plowed, the acorns should be planted in holes about 4 feet apart each way, although the proper distance will depend upon local conditions. Three or four acorns should be placed in each hole and covered with about 1½ inches of earth. If the planting is done on plow land, the soil may be prepared as for any field crop.

Red oak can be grown in pure stands, but it will often do well with other oaks, sugar maple, white elm, chestnut, white pine, and hickories. With chestnut and hickories red oak needs to be given a start of two or three years, so that it will not be overtopped; but other oaks, elm, sugar maple, and white pine may be planted at the same time. Fast-growing trees, like locust, should not be planted with red oak, unless they are certain to be cut back whenever their branches interfere with the latter.

Plantations of red oak need very little care, except where the rainfall is so deficient that the soil must be cultivated to conserve the moisture. All that is ordinarily necessary is to see that the little trees are not smothered by grass and weeds, that stock and fire are kept out, and that the plantation acquires the character of a forest as soon as it can. Weeds and litter on the ground and shrubs that stand below the crowns of the trees are good and should not be interfered with.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

SHAGBARK HICKORY (*HICORIA OVATA*).

FORM AND SIZE.

The shagbark hickory is a forest tree which commonly attains a height of 70 to 80 feet and a diameter of about 2 feet. Under favorable conditions, a height of 120 feet and a diameter of 4 feet is reached. When grown free the stem often branches near the base and the crown becomes full, though it always remains narrow; in the forest, the crown is short and small, while the stem frequently has a clear length of from 50 to 60 feet.

The characteristic feature of the shagbark hickory, from which it gets its name, first appears in the older trees in the long, loose plates or strips of bark which are produced on the trunks. On young trees the bark is very smooth and close.

RANGE.

The natural range of shagbark hickory is from southern Maine west through southern Michigan to eastern Kansas, Nebraska, and Texas, and south along the Appalachian Mountains to Florida, Alabama, and Mississippi. It reaches its best development on the western slopes of the Appalachians and in the regions drained by the tributaries of the Ohio River.

The shagbark hickory is generally found in mixture with other trees, although pure stands are not rare. Its principal associates, besides other hickories, are the oaks, maples, and ashes, chestnut, basswood, and yellow poplar.

The tree is recommended for planting on good soil in the valley of the Ohio River and along its tributaries in Ohio, Indiana, Illinois, Kentucky, and Tennessee, and on fertile hillsides of the Appalachian Mountains.

SILVICAL QUALITIES.

Shagbark hickory grows best in a deep, rich, moist loam. It does well in other moderately rich soils which permit the taproot to penetrate to a moist subsoil, and in the Middle States makes good growth in comparatively well-drained situations wherever it can get the requisite amount of sunlight. It will not thrive in a hard clay soil, or in pure sand, or where a layer of hardpan lies near the surface.

It is intolerant of shade and does well only in the open or when surrounded by other trees which only slightly obstruct the light. When overshadowed, it grows very slowly. Under right conditions

the rate of growth is fairly rapid, comparing favorably with that of white oak.

The tree is subject to the attacks of fungi, which do considerable damage to the leaves and twigs, and numerous insects feed upon it. In recent years a large number of trees have been attacked by the hickory bark beetle, which in some sections has killed nearly all of them. The tree is valuable enough, however, to be worth planting in spite of these dangers.

ECONOMIC USES.

The wood is heavy, hard, very strong, tough, flexible, but not durable in contact with the soil. It is used extensively in the manufacture of carriages and agricultural implements, and for ax and tool handles. There is, in consequence, a good demand for the lumber, at a high price. Second growth hickory, or that which is largely sapwood, is especially esteemed. The wood of the young sprouts is used in making baskets, barrel hoops, and other articles in which flexibility and toughness are required. The wood is also valuable for fuel.

PROPAGATION.

Shagbark hickory reproduces itself both from seeds and from sprouts. Natural reproduction by seed, however, is seldom good, because squirrels eat a large percentage of the nuts, or in mixed stands in the forest the light-loving seedlings are suppressed by other species.

Sprouts from young hickory stumps grow rapidly, and the sprout method of reproduction is advised where an existing plantation or a natural grove of small trees is to be renewed. If good trees are to be produced from stump sprouts, the stumps should be cut low and left smooth and slanting on top. The low stump compels the shoots to start close to the ground, where they can soon form a root system of their own and become self-supporting; while the slant causes rain to run off, and thus prevents decay. All but two or three of the best sprouts should be removed from each stump at the end of the first season. The sprout method is particularly well adapted to the production of small-sized material for hoop-poles and carriage stock.

PLANTING.

On account of the strong taproot which shagbark hickory develops, the cultivation of seedlings in a nursery is advisable only where nuts planted in the field are sure to be destroyed by mice or

squirrels. The best plan is to gather the nuts in the fall, keep them over winter between layers of sand, and plant them in the spring where the trees are to stand permanently. If the nuts are properly handled and not disturbed, from 50 to 75 per cent of them will germinate, but, since rodents are always to be feared, it is well to plant two or three nuts in each hole. They should be planted about 2 inches deep. The growth of the seedlings during the first season should be from 6 to 9 inches.

The spacing will depend upon the object of the plantation; if nuts are the object chiefly desired, wide spacing (about 20 feet by 20 feet) is essential, whereas for a woodlot about 6 feet by 6 feet is right.

Shagbark hickory does well when planted in pure stands, but if the plantation is to be allowed to grow to a considerable age, some other slow-growing species may be mixed with it, or, after it has attained a good growth, it may be planted with a species tolerant of shade. Hemlock and sugar maple are good trees for this purpose.

CARE AFTER PLANTING.

If the plantation is on tillable land, it should be carefully cultivated until the trees become large enough to shade the ground. In any case live stock of all kinds should be excluded and protection against fire should be provided for. If the plantation is attacked by the hickory bark beetle, the infested trees should be cut and the bark should be burned before the middle of May, or advice should be asked of the Bureau of Entomology, U. S. Department of Agriculture.

Approved: JAMES WILSON, Secretary.
Washington, D. C., November 24, 1906.

BASSWOOD (*TILIA AMERICANA*).

FORM AND SIZE.

The basswood is a forest tree which often attains a height of 70 to 80 feet, and a diameter of 2 feet. Under favorable conditions it may be considerably larger. When grown free the tree bears a large, compact crown, which makes a dense shade; in the forest it has a straight stem with but few branches, which are closely clustered at the top. The inner bark (bast), from which the tree gets its name, is fibrous and tough.

RANGE.

The natural range of the basswood is from New Brunswick south along the Allegheny Mountains to Alabama, and westward to eastern Texas, Nebraska, and southern Minnesota. The tree is commonest about the Great Lakes but attains its best development on the bottom lands of the Ohio River, where it is associated with white oak, cottonwood, white ash, black walnut, and hickories. It may be planted on good soils almost anywhere within its natural range; though the most favorable region for economic planting is within the Northeastern States and north of the Ohio River.

SILVICAL QUALITIES.

The basswood is best suited to deep, rich, river bottom soils, and to cool situations. While it will maintain itself on poorer uplands, it is recommended for planting only where the soil is moist and well drained and where droughts are infrequent. It is, in general, a hardy tree. It is moderately tolerant of shade, and the seedlings require some protection from the hot sun. In dry situations it is subject to injury from the sun's heat.

The rate of growth is fairly rapid during early age, being about the same as that of red oak and Norway maple. After attaining maturity the trunk frequently becomes hollow.

The basswood is sometimes attacked by insects, which denude it of leaves or bore into the bark, but serious damage is not frequent. The European species are much more liable to insect injury than the native basswood, and are much less desirable trees generally.

ECONOMIC USES.

The light brown wood is soft, straight-grained, and easily worked but not durable. It is often sold under the name of whitewood, and is largely used for house lumber, woodenware, carriage bodies, panel works, trunks, and paper pulp.

Its large crown and dense foliage render it desirable for planting along roadsides and about the home, and also for low shelterbelts throughout the greater part of its range. Its flowers, which yield great quantities of fine honey, lend it great value for bee keepers.

PROPAGATION.

The basswood reproduces freely both by seed and by sprout. The seed ripen in September or early October, and may easily be collected while attached to their large wings or bracts. They should be separated from the wings and plated at once in nursery beds, as alternate freezing and thawing during the winter rots and loosens the seed coat and causes early germination. If it is impracticable to plant in the fall, they may be kept over winter in a cool, dry place between layers of sand.

The basswood is one of the most prolific among our native trees in sprouts from the stumps, and hence this method of renewing an old stand is recommended. To secure vigorous sprouts the trees should be felled between November and March and the stumps cut low. Sprouts then start close to the ground, where they can soon develop a root system of their own and become self-supporting. All but two or three of the sprouts should be removed at the end of the first season. Under favorable conditions a sprout grows only about a foot the first year.

The basswood seedling develops a single stout root, but this is soon replaced by a number of lateral roots which give the tree a strong hold upon the ground.

PLANTING.

In planting the basswood it is best to use one-year-old seedlings, which should be set out as soon as the frost is out of the ground and before the leaves unfold. As a rule it is advisable to space the trees about 5 feet apart each way.

Basswood does well when planted in pure stands, but it is also of value in mixture with white or red pine (on good soil), or with white elm, white oak, red oak, maple, or hickories.

CARE AFTER PLANTING.

In most situations to which basswood is adapted, little cultivation is needed, since the heavy crowns and rapid growth of the young trees will soon form dense cover, which will exclude grass and weeds, and furnish the proper soil conditions. Where the undergrowth is very rank, however, it is necessary to clear out the weeds in order to give the trees growing space.

Cattle have an especial fondness for basswood boughs and foliage, so that the young trees must be carefully protected from them.

The plantation should be carefully guarded from fire, and should be allowed to assume the character of a forest as soon as it can.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

BLACK LOCUST (ROBINIA PSEUDACACIA).

FORM AND SIZE.

The black locust (known also as "yellow locust" or often simply "locust") is a forest tree which usually attains a height of from 40 to 60 feet, with a diameter of from 1 to 1½ feet. Under the most favorable conditions it may reach a height of 80 feet and a diameter of 3 feet. In the forest the tree has a clear, straight stem and a small crown. In the open or when grown in plantations the stem tends to divide early, and a more spreading and longer crown is formed. Individual trees, especially when grown in the open, are liable to be bent or twisted by storms.

RANGE.

The natural range of the locust is throughout the Appalachian Mountains from Pennsylvania to Georgia and in certain portions of eastern Indian Territory and Arkansas. It reaches its finest development on the western slopes of the Appalachians in West Virginia.

The locust is found in mixture with other trees of the forest or in pure stands on forest land that has been burned over. On slopes its principal associates are black, red, and chestnut oaks, chestnut, pignut hickory, and maple. Along streams it occurs with ash, maple, black walnut, and other species.

Theoretically, the range for planting is extensive, covering the region between the Atlantic Ocean and the Mississippi River and

extending west of the Mississippi River south of the thirty-eighth parallel as far as the Rocky Mountains. It is also adapted to the valleys of Utah, Idaho, and eastern Oregon and Washington when planted on irrigated land. The forest plantations to be seen near Salt Lake City, Utah, and Walla Walla, Wash., are among the best in the United States. Recent investigations indicate that the locust can be grown with success in portions of California. Its actual range for economic planting, however, is greatly restricted by the danger of insect injuries.

HABITS AND GROWTH.

The locust grows best on a deep, well-drained, fertile loam, but will grow on almost any soil except a wet, heavy one. It attains an excellent development on limestone formations.

Locust is very intolerant and requires an abundance of light during its entire life. When overshadowed it declines very quickly.

In its native home it is found along streams, on the borders of the forest, or singly and in groups on the steep slopes.

Locust is a rapid-growing tree, but is relatively short lived. In good situations it makes an average annual height growth of 2 to 4 feet and a diameter growth of one-quarter to one-half inch. This rate is sometimes maintained for twenty-five or thirty years, but more frequently the growth becomes slower between the fifteenth and twentieth years. After the fiftieth year growth almost entirely ceases.

THE LOCUST BORER.

The value of the locust is practically destroyed in many parts of the United States by the locust borer, which riddles the trunk and branches. The attack may commence when the trees are very small, and where the borers are numerous the plantation is killed outright within a short time. In localities where the attacks of this insect are slight it is sometimes possible to grow the trees to fence-post size before the plantation is seriously affected. Plantations of locust in Oklahoma, Indian Territory, and in the States west of the Rocky Mountains are almost entirely free from injury by this insect. In most of the States east of the Rocky Mountains planting is restricted or made impossible, according to the local severity of damage by the borer. In case this insect or others seriously injure a forest plantation of locust, the Bureau of Entomology of the Department of Agriculture should be consulted at once.

ECONOMIC USES.

The timber of the locust is extensively used for fence posts, ribs of vessels, treenails, insulator shanks, and vehicles. Its great durability in contact with the soil makes it very valuable for use in the ground, and its toughness and elasticity give it value where great strength is required. The tree is also valuable for fuel, being about equal to bur and white oak for this purpose.

The most common use of locust is for fence posts, for which purpose it has been extensively grown. Because of the large proportion of heartwood the young wood is almost as durable in the soil as the old. Locust posts, under average conditions, will last from fifteen to twenty-five years.

METHODS OF PROPAGATION.

Locust reproduces itself abundantly by seeds and by stump and root sprouts. It extends itself rapidly over old fields and along fence rows. Burned and cut-over lands in the mountains of Pennsylvania and West Virginia are thickly covered with locust seedlings, frequently giving rise to valuable pure stands of this species. The seed is retained on the trees well into the winter and distributed long distances by the strong winter winds. Wherever locust has been planted outside of its natural range the same tendency to spread by seed and root sprouts is exhibited, and young stands killed by fire replace themselves at once by sprouts.

PLANTING.

The seed may be gathered locally by the individual planter or may be purchased from dealers. It may be left in the pods and stored in a cool, dry place for as long as two years without serious harm. If the seeds are removed from the pods, they should be stratified in moist sand in a cool place. Just before planting, the seeds should be soaked for four or five days in water that has been heated to a temperature of 150° to 160° F., which will cause them to swell. Planting should immediately follow the soaking of the seeds, as under no consideration should they be allowed to dry out. The percentage of germination under these conditions is about 50 to 75 per cent.

Spring planting is in general advisable, although the seed can be sown as soon as it matures. The soil of the nursery should be well pulverized, rich, and loamy. If hand cultivation is to be given, the drills may be 12 to 15 inches apart, but if horse cultivation is to be

practiced, rows 2 to 3½ feet apart will give the best results. The seed should not be covered to a greater depth than one-half inch, and the soil should be kept uniformly moist during germination. A pound contains about 29,000 seeds and is sufficient for a row 900 feet long. The seedlings will be large enough to set out in their permanent sites the following spring after planting the seed in the nursery, and in one year they should have attained a height of 1 to 3 feet.

Since the locust has a wide-spreading root system, it requires plenty of room for the proper development of the tree. A spacing of 4 feet apart each way is too close unless very early thinnings can be made and the material utilized for stakes. In the East the trees should be set at least 6 feet apart each way. In the Middle West they should be spaced 4 feet apart in rows 6 feet from each other or 3 feet apart in rows 8 feet apart.

Locust does well in pure stands, but in the semiarid region of the Middle West, where the forest plantation is valued also for its protective character, it may be mixed with Russian mulberry, Osage orange, or green ash.

CULTIVATION AND CARE.

In the Middle West careful preparation of the soil and cultivation for several years after planting are essential for successful growing of the locust. In order to secure a stem that will make straight posts, poorly formed or double-headed trees may be cut back to the ground or pruned two or three years after planting.

Stock should be entirely excluded from the plantation and every precaution taken to prevent fire from running over the ground.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

WHITE ELM (*ULMUS AMERICANA*).

FORM AND SIZE.

The white elm is a forest tree which frequently attains a height of from 100 to 120 feet and a diameter of from 6 to 8 feet. Its average size is somewhat smaller, although it is among the largest of our hardwood trees.

When grown in the open the trunk almost invariably divides a short distance above the base, forming a wide-spreading, graceful crown. Forest-grown trees exhibit a wide divergence in form. The trunk is often clear of branches for over two-thirds of its length, straight and gradually tapering, surmounted by a compact crown. At the base the larger trees are often buttressed. The slender, interlaced twigs and the rough, flaky bark, divided into narrow ridges, are typical of the tree in all situations.

RANGE.

The natural distribution of the white elm is extensive. It ranges from Newfoundland to South Dakota and south through western Nebraska to Texas. The tree does not grow in pure stands, but occurs sparingly in mixture with the oaks, ashes, sycamores, yellow poplars, and other hardwoods.

The planting range of white elm is fully as wide as its natural distribution. It may be planted throughout the East and is especially well suited for prairie and plains plantations.

HABITS AND GROWTH.

White elm reaches its best development on deep, fertile, alluvial soil, moderately well drained. The species, however, readily adapts itself to soils less favorable or even to those decidedly poor. It is a hardy tree and will endure great extremes of temperature and moisture.

The elm is somewhat intolerant of shade. Its root system is deep, with an extensive lateral development. It is a fairly rapid-growing tree and often reaches great age. On poor situations both the rapidity of growth and the length of life are reduced.

Although seldom injured by wind, snow, or fungi, the white elm is subject to damage by insects. Borers often injure or kill the tree, but by far the greatest damage is done by the elm leaf-beetle and other defoliating insects. Because of them the planting of the elm as a park tree has been discontinued in many parts of the country.

It is possible, however, to control the defoliators by early and thorough spraying with an efficient insecticide.*

ECONOMIC USES.

The wood of white elm is strong, tough, fibrous, and difficult to split, but is not durable. It is in growing demand as a slack-cooperage material, and its use in this industry has resulted in a rapid increase in the stumpage value. The timber is also used for flooring, wheel stock, and shipbuilding, and in the manufacture of agricultural implements.

The hardness of the species and its indifference to soil conditions make it a very suitable tree for protective planting. For ornamental planting the suitability of the white elm is everywhere recognized. It is probably the most desirable of our hardwoods for such use.

METHODS OF PROPAGATION.

The white elm is a prolific seeder, bearing an abundant crop almost every year. Natural reproduction is usually by seed. European experience has shown that this species sprouts well, but in this country it is not advisable to depend on sprout growth, except from young trees and for the production of small-sized material. The seed ripen in May and should be collected and planted as soon as possible after ripening, since they retain vitality but a short time. It is due to this fact that purchased seeds are often worthless. In all cases home-collected seeds are more satisfactory. The seeds may be gathered by sweeping them up from the ground or by shaking them from the trees into a canvas spread out below.

Plantations should be established with nursery-grown seedlings. The soil of the nursery should be rich, mellow, moist, and fairly well drained. If it is thoroughly worked, no seed beds are required. The seed should be planted in the spring, 60 to 80 seeds per linear foot, in rows 12 to 18 inches apart, and covered with not more than one-eighth of an inch of fine earth. The surface of the rows should be "firmed" with a light roller or a board and mulched until the seedlings appear.

There are 93,000 white-elm seeds in a pound, sufficient to plant nearly 1,200 linear feet of seed rows and to produce 20,000 to 30,000 seedlings. With rows 18 inches apart, 1,200 linear feet of drills would require 1,800 square feet for nursery rows. It is not neces-

* For further notes on these insects see Farmers' Bulletin No. 99. Suggestions for the control of borers, scales, and other enemies of white elm will be furnished, on request, by the Bureau of Entomology of the Department of Agriculture.

sary to shade the young plants, although at times partial protection from constant sunshine will be beneficial.

Further information concerning nursery practice is contained in Bulletin No. 29 of the Forest Service, which may be obtained upon request.

PLANTING.

When one year old the seedlings will be 5 to 10 inches high and should be transplanted to the permanent site. The use of older and larger seedlings is sometimes desirable, but in most cases one-year-old plants are suitable for commercial planting. Where the seedling forms a long root this should be cut back to 6 inches and the top pruned correspondingly.

Spacing will vary with local conditions. In general, moderately close planting is necessary to maintain forest conditions during the early life of the stand and to properly shade the ground and protect the soil. A spacing of 6 feet each way usually will prove satisfactory. In later life all stands should be thinned to encourage the best development of the remaining trees.

The white elm thrives in pure stands, but will also grow well when planted with more tolerant species, such as maple, white and red oak, and the ashes. Other trees suitable for planting with elm are black walnut, black cherry, yellow poplar, and basswood.

For prairie planting it is essential that the soil receive thorough preparation. Where there is a heavy sod it should be turned under two or three years before the trees are planted and, if possible, a crop of cereals raised on the ground.

In the East no preparation further than preparing holes in which to plant seedlings is necessary.

CULTIVATION AND CARE.

Cultivation after planting is required only in the case of prairie plantations. In such situations the stand will be much benefited by the better moisture conditions and the suppression of weed growth resulting from cultivation. Eventually the young trees will shade the ground and establish forest conditions.

The young trees should not be planted where there is danger of them being overtopped and suppressed by brush growth and weeds. Plantations should be protected from fire and closely watched to detect the presence of injurious insects.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906,

WHITE PINE (PINUS STROBUS).

FORM AND SIZE.

The white pine is the largest of all conifers indigenous to the eastern part of the United States. On proper soils it may reach the age of 250 years or more and attain a height of 150 to 175 feet and a diameter of 3 to 5 feet. The crowns of mature white pines in mixed forests conspicuously overtop the surrounding hardwoods. Mature forest-grown trees are characterized by straight, columnar trunks, destitute of branches for a distance of 75 to 100 feet from the ground, and thin, irregular crowns. At the base of the trunks of old trees the bark is thick and deeply furrowed and of a dark brown color, but becomes thinner and grayish toward the upper part of the tree.

RANGE.

The northern boundary of the natural range of white pine is from Newfoundland west to eastern Manitoba. Through the lake region the range extends west to eastern Minnesota and south to northern Iowa, Indiana, Illinois, and Ohio. In the East it originally occurred throughout New England and the Middle States, and, on the higher elevations of the Appalachians, southward to Georgia and Alabama. It was found in greatest abundance and reached its best development in the St. Lawrence Valley and the lake region. It usually grows in association with hardwoods and other conifers and reaches its largest size in mixture with the former.

White pine may be planted in suitable situations throughout its natural range, but for economic purposes planting should be restricted to nonagricultural lands in New England, Pennsylvania, New York, the Lake States, and the higher slopes of the Appalachians, and should be resorted to only when conditions render natural replacement impracticable, since in many situations, if the land is protected from fire, white pine will extend itself rapidly by natural seeding. Much of the abandoned agricultural land in New England may be profitably planted with this tree, which can be recommended for reforesting burned and cut-over areas generally throughout its economic planting range.

HABITS AND GROWTH.

White pine grows naturally and best in a cool climate on a fresh, light, deep, and sandy soil with a porous subsoil. It readily adapts itself to both dry and moist soils, for it is found on the poorest and

dryest sand and on steep, rocky slopes, and also on moist clay flats and river bottoms, provided the latter are not continuously wet. It is capable of disputing possession with hardwoods, even on fresh, medium-heavy clay and loam soils. It will endure windy and cold exposures, but should not be planted near the seacoast, since it can not withstand strong sea breezes.

White pine can endure considerable shade for a number of years, but as it becomes older it requires more and more light for its development, and after it is 40 or 50 years old the crown demands full sunlight. On this account white pine is best grown in mixture with slower growing hardwoods or other conifers which will not overtop or shade it from above.

In artificial plantations or on abandoned farms which have been reforested naturally, white pine usually grows much faster than in the forest, especially during the early years. Records of plantations in New England show that the average growth of the larger trees ranges from one-fourth to one-third of an inch in diameter annually. It is possible in the eastern portion of the United States to produce saw timber in from sixty to seventy years. Smaller trees suitable for box boards and match blocks can be produced in thirty or forty years.

Owing to the thinness of its bark, young white pine is very susceptible to injury by fire, which must be most carefully excluded from plantations; but between the fifth and twentieth years the greatest cause of injury to the white pine is a weevil which in the grub stage mines in the terminal shoot and causes a crooked stem. Repeated attacks make the tree unmerchantable.

ECONOMIC USES.

The wood of the white pine is soft, light, straight grained, and easily worked, and will not warp. It was formerly used to a great extent for general construction, but on account of its growing scarcity and high price it has been largely superseded for this purpose by other woods. The better grades of this lumber are still used in naval construction—for decking, interior finishing, and spars.

Second-growth white pine is used principally for low-grade lumber, match blocks, box boards, wooden ware, and straight-staved cooperage. Where a demand for this material exists, white pine on nonagricultural lands will prove of economic value. Throughout the manufacturing regions of New England, wherever there is a market for small material, white pine will prove the most profitable conifer that can be grown on poor soils.

Within its range of economic planting white pine forms a very satisfactory windbreak or shelterbelt.

METHODS OF PROPAGATION.

White pine reproduces only from seed. Plantations should be started from nursery-grown stock rather than from seed, which usually gives unsatisfactory results.

If only a few hundred plants are desired, it usually is cheaper and easier to buy them from a nurseryman than to raise them, but if several thousand plants are needed it will be cheaper to raise them from seed. Purchased stock should be secured in the early spring before planting time, and upon receipt should be unpacked immediately and the roots dipped into a bucket containing thin mud. The trees should then be heeled-in in a shady place to await planting time, care being taken that the foliage does not become covered.

If the trees are to be grown in a home nursery, the seed may be purchased, but a large saving may be made by collecting it in the neighborhood, if this can be done. Cones should be gathered during the latter part of August or in September, before they begin to open. They may be picked from standing trees, or from felled trees if lumbering operations are being conducted nearby. When gathered, the cones should be spread out on a sheet or floor, where they will be exposed to the sun, yet protected from wind and rain. Within a week they will open and allow the seed to drop out. A thorough stirring will separate the seed; after which the cones may be raked away. One bushel of cones will yield from one-half a pound to 1 pound of clean seed, which will average from 29,000 to 30,000 seeds per pound. Seeds may be stored over winter by placing in small sacks and hanging the sacks in a cold, dry place.

The most successful method of raising seedlings is by sowing the seed in nursery beds. Seed beds should be composed of fine, loose, fairly fertile soil, moderately moist but always well drained. The soil must not be too rich; otherwise the seedlings will suffer when transplanted to the less favorable conditions of the permanent site.

A convenient size for seed beds is 4 by 12 feet, with a path about 18 inches wide between the beds, so that the plants can be weeded and cared for with ease. The seed should be sown in drills, 4 to 6 inches apart, and lightly covered with fine earth. Sowing should not begin until the ground is warm enough to cause rapid germination. Seed may be safely sown at the time garden vegetables are

planted. After a seed bed is sown the surface should be "firmed" with a board or light roller.

The plants will begin to appear in from three to five weeks. Like other conifers, they will require partial shade during the first season, but subsequently can endure full sunlight, especially in New England. A shade frame of lath supported 18 inches above the bed will serve the purpose.

One pound of white-pine seed is sufficient to sow 500 linear feet of seed drill, or about 200 square feet of seed beds, with drills 6 inches apart. Even with proper care some seed may fail to germinate promptly, but about 10,000 plants may be expected for every pound of fertile seed sown. White-pine seed retains its vitality for several years, and when kept in cold, dry storage a fair percentage has been known to germinate after five years. Fresh seed, however, is always to be preferred.

Two years after sowing, the seedlings should be transplanted in the spring from the seed beds to nursery rows, in order to develop a good, fibrous root system. They may be set out 3 inches apart, in rows from 12 to 18 inches apart. The roots should be set slightly deeper than they were before. The best method of transplanting is to open a shallow trench of the proper depth with a spade and set the plants by hand, carefully covering the roots of each plant with fine soil and gently firming it. Transplants, if thoroughly cultivated and weeded, will be ready for final planting at the beginning of the fourth season. At this age they should be 6 to 9 inches in height and have a well-developed system of fibrous roots.

In the early years of the white pine a very injurious fungus must be guarded against. If the soil becomes soaked, or sufficient light and air are withheld, ideal conditions for the action of the fungus exist, and the usual result is the "damping off" of large numbers of the young trees. In shaded seed beds, when the quantity of rain is sufficient to endanger the young trees, the "damping off" may be checked by so raising one side of the shade frame that it acts as a partial roof. Dry sand sprinkled over the seed bed will usually tend to hold the fungus in check.

Birds and field mice are often very troublesome around coniferous seed beds. If danger from such sources is expected, the seed may be coated with red lead mixed with linseed oil before sowing. This is distasteful to most birds and rodents and is usually quite effective. Another method is to protect the beds by netting and similar devices until the seedlings are sufficiently developed to be free from danger.

PLANTING.

White-pine seedlings should be planted on the permanent site in the early spring when the ground is dry enough to work. In most cases the site will not need preparation previous to planting.

The roots must not be allowed to become dry during the planting. Even brief exposure of the roots to the sun and air will cause the plants to die.

The distance apart at which the trees should be planted depends upon the character of the site and whether the pines are to be planted in mixture with other trees or in a pure stand. The usual distance is 6 by 6 feet apart.

In pure plantations white pine produces excellent forest conditions, but it is also adapted to growth with a number of other species of which chestnut, European larch, Norway spruce, red oak, and hard maple are the more important. Chestnut is a very desirable tree for mixture with white pine on well-drained soils which are not calcareous, but since the planting range of chestnut does not, except in Vermont and New Hampshire, extend above the forty-second degree of latitude, it can not be used in mixture except within a limited area. In Pennsylvania, Michigan, Wisconsin, Minnesota, and northern New York white pine may be mixed with European larch, Norway spruce, or hard maple, and on soils adapted to red oak the latter may be used to advantage. In mixture with chestnut or European larch white pine should constitute at least two-thirds of the stand, spaced according to the following diagram:

[6 feet by 6 feet.]

P P S P P

P S P P S

S P P S P

P P S P P

P=white pine. S=chestnut or European larch.

Mixed with other species, the stand should be composed of an equal number of white pine and the associated species planted alternately.

CULTIVATION AND CARE.

The cultivation of white pine in plantations throughout the eastern part of the United States is unnecessary. Persistent dead branches should be removed when possible, but it is not advisable to prune live ones. Where there is a demand for small material, the stand may be profitably thinned at the age of 20 to 30 years, removing at this time all suppressed or intermediate trees which are not needed in the stand to shade the ground or to assist in naturally developing the large trees.

Fire must be kept out of stands, since the bark of young trees is thin and easily damaged, and injuries from this source cause rapid decay.

Information regarding general nursery practice and planting may be obtained from the publications of the Forest Service, which will be forwarded upon request. Insect damage should be reported promptly and specimens mailed to the Bureau of Entomology of the United States Department of Agriculture, where they will be identified and measures suggested for their control.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

CHESTNUT (*CASTANEA DENTATA*).

SIZE AND FORM.

The chestnut is among the largest of our hardwood trees, and in the region of its best development has been known to reach a height of 120 feet and a diameter of great size. Throughout the greatest part of its range, however, it is much smaller, with an average height of 80 to 100 feet and a diameter of from 2 to 4 feet. When grown in the forest it forms a tall, clean, fairly cylindrical trunk; in the open it assumes a form like a fruit tree, with a short, thick trunk and a broad, spreading crown. The bark is thick and deeply ridged, and the root system is extensive, in both lateral and vertical development.

RANGE.

The chestnut is distributed throughout the eastern part of the United States at elevations varying from sea level in Massachusetts to 5,000 feet in North Carolina. It ranges from southern Maine southward through New England, but in this region is most abundant in the lower valleys of the Merrimac and Connecticut rivers.

Except near the sea, it is common in Rhode Island and Connecticut and as far south as Delaware. It is found also in the Province of Ontario and in the Eastern States, especially in New Jersey, Pennsylvania, and parts of Maryland. Further south it is found along the Appalachians to Alabama, growing well in all soils above 2,000 feet in elevation, but less abundantly below. In the Middle West it is confined to Michigan, Indiana, and Illinois.

Large areas throughout the East, particularly in New England, New York, Pennsylvania, and Maryland, are well adapted to chestnut. Outside of its natural range, however, the success of this species is doubtful. Chestnut can be grown fairly well throughout Missouri and southeastern Iowa, in the eastern counties of Nebraska and Kansas, and in the southern half of Minnesota, but nowhere on prairie soil is it long-lived or of first-class growth. In Colorado it grows well under irrigation, and would probably succeed in other parts of the West if well watered. If it is planted too far north the shoots fail to become woody before they are nipped by the early frosts. The tree will endure the heat and cold of its natural home and will remain thrifty in sunny, dry situations, but is very susceptible to injury from hot winds.

HABITS AND GROWTH.

Chestnut will thrive on a variety of soils, from almost pure sand to coarse gravels and shales. On limestone soils, however, it nowhere makes good growth. In general it prefers the dry, well-drained, rocky land of the glacial drift to the richer, more compact alluvial soil of the lowlands. Chestnut does not need a rich soil so much as one whose physical structure insures good drainage. Light is essential to the tree, since it is somewhat intolerant of shade.

Few of our valuable hardwoods are more rapid in growth than chestnut. Seedlings usually attain a height of from 10 to 15 inches at the end of the first season. From then until the thirtieth year the annual height growth will average from 15 to 20 inches. Coppice sprouts make even more rapid growth during the same period, but in later life their growth falls off rapidly.

Ordinarily the chestnut, as a forest tree, is little troubled by insects or fungi. Several forms of borers work in the wood and under the bark, and their ravages are sometimes extensive. The nuts are attacked by the larvæ of two or more species of weevil, but to the timber grower this is not serious. Trunks of the young trees in warm situations are sometimes affected by a body blight or "sun

scald." The bark cracks and loosens on the south and west sides of the tree, and the affected portion finally dies. The extent of injury from this source is, however, not great. During the past ten or fifteen years a new disease of unknown cause has been doing considerable damage.

ECONOMIC USES.

Chestnut timber is in great demand. The wood is light, moderately strong, coarse grained, and elastic. It works easily and is very durable in contact with the soil. In seasoning, the wood often checks and warps, but damage from this source is not serious. It is used in cabinet work and cooperage, and for fence posts, telegraph and telephone poles, ties, and mine timbers. The presence of tannin in the wood increases the demand for small-sized and inferior material, and large quantities are used in the manufacture of tanning extracts.

Except in portions of the Southern Appalachians, very little of the original chestnut remains, but the coppice reproduction is so rapid that a considerable supply of small-sized timber is still available. The excellent qualities of the wood insure a permanent demand and good price.

METHODS OF PROPAGATION.

Chestnut plantations may be established by direct seeding or by the use of nursery-grown seedlings. Seed may be purchased, or collected from trees in the vicinity. To prevent drying out and consequent loss of germinating power, collected seeds should be kept stratified in moist sand until the following spring.

Home-grown seedlings are usually superior to those purchased from commercial dealers, and are much cheaper. The nursery should be located on fresh, well-drained, fertile soil, under conditions such as are usually present in an old garden spot. Thorough cultivation of the soil is required, but the preparation of seed beds is unnecessary.

Seed should be planted, 10 to 12 per linear foot, in nursery rows 18 inches apart. Care should be taken not to cover the seed more than 1 inch deep.

A bushel contains 6,500 to 8,000 nuts, sufficient to plant 650 linear feet of nursery rows and to produce at least 4,000 plants. These rows will cover an area of 975 square feet. While in the nursery, seedlings require careful cultivation and should be kept entirely free from weeds.

PLANTING.

When planting on permanent sites the trees should be set 5 or 6 feet apart, each way, the width depending upon the quality of the site and the possible market for the product of thinnings. In good situations the wider spacing is advised.

If the trees are to be grown directly from seed without transplanting, seed spots should be prepared, spaced as above. Two or three seeds should be planted in each and covered about 1 inch deep with fine earth. Only one tree should be allowed to remain in each hill. This method is recommended by many, and where there is no danger of squirrels it will prove satisfactory and less expensive than the use of seedlings. In general, however, the seedling plantation will be safer and will give better results.

The system of management best suited to the chestnut is the pure coppice, with a rotation of from twenty-five to thirty-five years. Coppice makes more rapid growth than seedling forest, and produces timber in many respects superior. The species also grows well in mixtures, particularly with the white and red pines and the European larch, and also with the oaks, ashes, and maples.

CULTIVATION AND CARE.

On the prairies, plantations should be cultivated until the young trees are well established, but in the East cultivation is unnecessary.

If insects appear in alarming numbers in the forest, specimens, together with an account of their habits, should be sent to the Bureau of Entomology of the Department of Agriculture for identification and suggestions as to their destruction or control.

The greatest enemy of the chestnut, as of other forest trees, is fire, from which it should at all times be fully protected.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

COTTONWOOD (*POPULUS DELTOIDES*).

FORM AND SIZE.

The cottonwood is naturally a tall, straight tree, and under favorable conditions may attain a height of 75 to 100 feet and a diameter of 2 to 3 feet. When grown in the open or in single rows it develops a large, wide-spreading crown and a short, heavy stem. In dense stands, however, the crowns become narrow and oblong and the stems long, slender, and free from branches.

The Carolina poplar, which is considered a horticultural variety of the common cottonwood, is widely used as a shade tree. It is not easily distinguished from the true cottonwood.

RANGE.

The eastern boundary of the natural range of cottonwood extends from central Quebec southward through northwestern New England, western New York, and western Pennsylvania; thence, south of the Potomac River, through the Atlantic States to western Florida. The western boundary extends from southern Alberta, in Canada, southward along the Rocky Mountains to northern New Mexico.

The cottonwood occurs usually in pure stands or in mixture with willow and other moisture-loving trees. On soils of the flood plains of the Mississippi River in western Kentucky and Tennessee, which are especially favorable, it forms a part of the mature hardwood forests.

For economic planting the range is confined to regions throughout the Middle West where there is a permanent supply of water near the surface.

HABITS AND GROWTH.

The most favorable site for cottonwood is the alluvial soil along water courses, for the most important factor in its growth and development is the available moisture in the soil and not the fertility. Forest plantations of cottonwood require a situation in which the water table is within 10 to 15 feet of the surface. Individual trees, or single rows, however, on account of their extensive root system, can maintain themselves in drier situations. So many failures have resulted from attempts to establish cottonwood groves on upland soils that it is usually considered impossible to grow the tree except in rows along highways and similar places. So planted, the trees are valuable for windbreaks and give good returns in fuel and re-

pair material. However, more satisfactory results will be secured by planting in permanently moist situations if production of lumber is desired.

Abundant light is required for development, and young stands tend to become thin. The crown cover is frequently so sparse that grass and shrubs come in under the trees and check growth. This drawback can be prevented by underplanting the grove with shade-enduring trees.

Growth in early life is very rapid. Small trees in a single year may increase from 3 to 5 feet in height and from 1 to 3 inches in diameter. Between the ages of 10 and 15 years the rate of growth gradually lessens, and under certain conditions maturity is soon reached.

Cottonwood is comparatively free from insect pests, though leaf insects occasionally do serious damage. In case of severe attacks application should be made to the Bureau of Entomology of the Department of Agriculture for information in regard to methods of control.

ECONOMIC USES.

The wood of cottonwood is light and soft. It is not strong, and it decays rapidly in contact with the soil. Regional factors of climate and soil cause marked differences in quality. In western Kentucky and Tennessee, for instance, the so-called yellow cottonwood furnishes a much better grade of wood than in the Missouri River region. The wood has a tendency to warp in seasoning, but this may be overcome by proper methods of piling.

Paper pulp, box boards, backing for veneer, the unexposed parts of furniture, wagon boxes, interior woodwork and boarding, and fuel are the principal products for which the wood is used. The increased value which the tree is gaining for these uses, coupled with the ease and rapidity with which it can be grown, renders it one of the important species for commercial planting in the Middle West. Its fuel value in some regions is especially high, since it furnishes a greater amount of wood in a given time than other species. In proportion to volume the relative heat production is, however, low.

Cottonwood is useful for protecting agricultural lands subject to annual overflow. A narrow belt of trees on the river side of such lands protects the fields from debris and checks the erosive action of the water. Plantations of cottonwood established on land between the river and the levee will not only protect the levee from damage

by wave wash caused by the wind, but will also give large commercial returns. It is also particularly adapted for planting along canals, since the roots do not grow into the water.

METHODS OF PROPAGATION.

Cottonwood seeds abundantly and extends itself rapidly over newly made land along rivers. The seed ripens in May or June, and unless it falls on a favorable situation it quickly loses its ability to germinate.

Propagation by seedlings or cuttings may readily be carried on. Large numbers of seedlings annually spring up on the sand bars, where 1-year-old trees for establishing a plantation can be easily and cheaply procured. A plantation may be established rather more cheaply by cuttings than by seedlings. The cuttings should be made from 1 to 2 year old branches of vigorous trees. Cuttings one-half inch in diameter and 18 to 24 inches long are of desirable size for ordinary use. Much larger cuttings, however, can safely be used and are often desirable where the erosion is very severe.

PLANTING.

Seedlings or cuttings of the cottonwood should be set out in the spring as soon as danger from severe frost is past. In the middle West this time ranges from the latter part of March to the first of May.

Seedlings may be quickly and cheaply planted by a man and a boy working together. With a spade the man makes an opening in the ground into which the boy slips a tree. The spade is then withdrawn and the soil about the tree firmed immediately, before the man advances for the planting of the next one.

Two-thirds of the length of the cutting should be below the surface of the ground, and on the portion above the ground there should be at least two or three good buds.

In planting groves on permanently moist situations the trees should be set 6 to 8 feet apart each way. This gives 1,210 or 680 trees per acre.

CULTIVATION AND CARE.

The growth of the cottonwood is so rapid where conditions are at all favorable that it is seldom, if ever, subject to the crowding or overtopping of less desirable species.

Plantations should not be used for pasturage for at least five years. Grazing animals not only eat the tender shoots and leaves,

but expose and cut off the roots by trampling the ground around the trees.

Fire is one of the most serious enemies of this tree, both in planted groves and natural forests. Protection can readily be secured by plowing several furrows around the plantation. If the furrows are kept free from weeds, fire will be effectually kept out. Where this is not possible a path or fire lane entirely surrounding the plantation should be raked free of leaves and debris. In the spring and fall, when the danger from fire is greatest, the plantations should be kept under observation, and all fires should be extinguished immediately.

Approved: JAMES WILSON, Secretary.

Washington, D. C., November 24, 1906.

HARDY CATALPA (*Catalpa speciosa*).

FORM AND SIZE.

The hardy catalpa is a tree of medium size, with slender branches forming a spreading, round-topped head. Under average conditions it grows to be from 50 to 70 feet high. In the forest it is straight and tall, and occasionally attains a height of more than 100 feet and a diameter of from 2 to 4 feet. Because of its frequent failure to form a terminal bud the catalpa has a tendency to crooked growth, and sometimes develops a short trunk with large branches close to the ground.

RANGE.

The hardy catalpa in its natural range was confined to a very limited region, extending from the valley of the Vermillion River, in Illinois, through southern Illinois and Indiana, western Kentucky and Tennessee, southeastern Missouri, and northeastern Arkansas. It was apparently distributed by backwaters along the overflow lands of the Wabash River, up nearby creeks, and down the Ohio and Mississippi Rivers as far as New Madrid, Mo. In southeastern Missouri it meets the common catalpa (*Catalpa catalpa*). The latter species is indigenous to southwestern Georgia, western Florida, central Alabama, and Mississippi, but is widely naturalized and cultivated east of the Rocky Mountains, growing as far north as eastern New England.

The hardy catalpa has been planted as far north as Turner County, in South Dakota, southern Minnesota, southern Michigan,

and southern Massachusetts, and westward to eastern Nebraska, central Kansas, and central Oklahoma. It has done well on irrigated lands in New Mexico, Colorado, and Utah, at the lower altitudes, and where the soil is free from alkali. The present range for economic planting is on the fertile alluvial lands of the middle West, south of the forty-first parallel of latitude. Catalpa plantations have been especially successful in the southern portion of Ohio, Illinois, and Indiana; in Nebraska south of the Platte River and east of Adams County, and in eastern Kansas.

HABITS AND GROWTH.

Catalpa requires a deep, fertile, porous soil for good growth, and it can not succeed on heavy, poorly drained land. It grows well on prairie soils and even where there is considerable sand, provided overflows are frequent or permanent water is within 10 or 15 feet of the surface. It is not adapted to poor sandy or stiff clay soils, or to those which have a tenacious gumbo subsoil. However, if a layer of clay which is not too heavy occurs beneath several feet of good soil it is of advantage, since it forms a beneficial soil foundation, retaining fertility and moisture. Catalpa will not tolerate a strongly alkaline soil. An annual rainfall of at least 25 inches is necessary for the best growth of the tree, unless it can send its roots down to the water table. Commercial plantations especially demand a good soil. It has been proved that the returns realized from a crop grown on the best soil are proportionately very much greater than those obtained from poor land in the same locality.

The hardy catalpa is very intolerant, and in dense stands the lower side branches are killed by the shade. If they become more than half an inch in diameter they cling to the tree for years after they die, thus delaying the complete pruning of the bole. New wood is deposited around the dead branch, but does not close tightly about it. The holes thus formed by the persistence of dead branches lead straight into the heart of the tree and conduct the germs of decay into the trunk. If fungus spores gain entrance, the heart decays and eventually the tree breaks down. The tendency to crooked growth and the failure to shed its limbs properly are the two most troublesome characteristics of the catalpa.

The hardy catalpa matures early and under cultivation is one of the most rapid-growing trees planted in the West. A height growth of $2\frac{1}{2}$ feet and a diameter increase of one-half inch annually for

the first ten to fifteen years are not unusual. It does not, however, often attain dimensions that fit it for saw logs.

Some of the trees in a plantation will be of suitable size for posts when from 8 to 10 years old, and five or six years later the entire crop should become merchantable. Good telegraph poles are grown in from twenty to thirty years, according to the adaptability of the soil for this species.

The hardy catalpa is, as a rule, free from destructive diseases. It is subject to severe attacks of leaf-eating insects, and a number of parasitic fungi often cause considerable damage to the foliage. Root rot is rare. The wood is quite resistant to decay-producing fungi. The wood of living trees is destroyed by two fungi, one of which causes a soft rot and the other a brown rot. The soft rot is common, the other only occasional. The soft-rot fungus enters the tree through the holes caused by rotting branches and destroys the heartwood very rapidly. The wood is changed to a soft, spongy mass incapable of standing any strain, so that broken trees are common in infected plantations.

ECONOMIC USES.

The rapid growth, durability in contact with the soil, lightness, elasticity, and high fuel value of catalpa wood make the tree one of the most valuable for economic planting. Catalpa wood cut from the living tree is probably immune from attack by fungous diseases, and is one of the most durable timbers known. When used for fence posts it often remains sound for thirty to forty years. Even in young trees nearly 75 per cent. of the wood is heartwood, so that when used for posts the decay of the sapwood does not materially affect the value of the post. The rich coloring of the wood makes it also well suited for cabinetwork.

The catalpa has been planted principally for fence posts and small telegraph poles. A few plantations have been made for the production of the railway ties. The desirability of growing catalpa for ties has not yet been established. Experience thus far has shown that plantations can be managed most profitably on a short rotation of from fifteen to twenty years for the production of posts or small poles.

The catalpa has unfortunately been discredited in many localities because of poor results from early plantations. These were in very many cases due to the substitution of an inferior species of a hybrid for the true hardy catalpa. While the quality of the wood

is somewhat similar, the common catalpa and its hybrids are much less hardy than *Catalpa speciosa*, are less erect in habit, and have a marked tendency to branch low.

METHODS OF PROPAGATION.

The catalpa reproduces by seed and by sprout from the stump. In starting a commercial plantation seedlings should be used, and these may be grown at home at comparatively small cost.

Seed may be purchased, but it is advisable for the planter to collect his own supply, if possible, since seed from certain undesirable species, more prolific than the hardy catalpa, has been sold extensively by dealers as genuine. The seed ripens in the autumn and the pods ordinarily hang on the trees all winter. It is well, however, to gather the pods as soon as the leaves fall, since some of them are likely to open and drop their seeds. The seed should be kept over winter in the pods, in cool, dry storage. Sowing should be done early in the spring, but not until the ground has become warm. Drills should be made in well-prepared, mellow soil, and the seeds sown a half inch apart and covered to a depth of about 1 inch. The rows should be far enough apart to allow thorough cultivation. Under average conditions the seedlings will grow 12 to 24 inches in height during the first summer, and will be suitable for planting the following spring.

One pound of hardy catalpa seed contains nearly 20,000 seeds, which will be sufficient to sow about 8,000 linear feet of drills. Between 40 and 75 per cent. of the fresh seed should germinate, and a pound may be expected to produce about 12,000 one-year-old plants.

PLANTING.

The planting site should be prepared by plowing and harrowing in the spring, and there is an advantage in growing a field crop on the site for one season before planting. It is usually advisable to plant one-year-old stock in the spring. In the South, however, where the winters are mild, catalpa may be planted with safety in the fall, after one season's growth in the nursery.

Proper spacing of the trees in the plantation depends to some extent upon regional and site conditions. East of the Mississippi catalpa may be planted 6 by 8 feet or 8 feet apart each way, but in the plains region it will be well to set the trees 4 by 8 feet or 6 feet apart each way. A spacing of 4 by 4 feet is advisable only when early thinning can surely be made. In general this very close spac-

ing should not be used, because the catalpa requires considerable room for lateral root development, and crowding will tend to lessen the vitality of the trees and to lower the rate of growth.

In raising catalpa the object is to obtain the best growth and most perfect form in the shortest possible time. To accomplish this a relatively wide spacing of the trees, supplemented by a limited amount of artificial pruning, is necessary.

While catalpa has thus far been planted chiefly in pure stands, an associate tree may prove desirable in the Middle West. This should be of a tolerant species and slower growing than the catalpa. This associate tree, or "filler," would complete the crown cover and would assist in pruning the catalpa and in forcing straight upward growth. Two species that are well adapted for planting with catalpa in the West are Russian mulberry and Osage orange.

CULTIVATION AND CARE.

Catalpa requires especial care if the best results are to be secured. Waste land and rocky hillsides are not suited to catalpa growing. In forest planting for profit such sites should be planted with saw-timber species and the catalpa confined to some area of good arable land, set aside expressly for the production of fence posts and small material.

It is usually advisable to cultivate plantations during the first three seasons, although in regions of abundant rainfall they may be planted with cowpeas or soy beans or sown to crimson clover after one season's cultivation. The disk harrow is the most suitable implement for the first cultivation, after which a common harrow may be used. The soil should be stirred often enough to maintain a good dust mulch for conveying moisture. After the first year cultivation should be shallow, so as not to mutilate the roots of the trees, and during the third season it may not be feasible at all, since by that time the ground between the rows will often be filled with a network of roots.

Except in the South, on rich soils, where height growth is especially vigorous, the young trees should be cut back to the ground during late winter or early spring after one or two seasons of growth in the plantation. A number of sprouts will spring up from the stump during the following spring, all of which should be removed during the early part of the growing season except the most vigorous one. Care should be taken not to tear the bark when removing the sprouts. The surviving stem should make a straight

branchless growth of from 6 to 10 feet the first season, and will largely do away with the necessity of pruning. Cutting back offers the simplest means of producing straight-trunks, and without retarding ultimate height growth, it accomplishes the same object as pruning at less expense.

If pruning is undertaken it should be done late in the winter or in early spring before growth starts. In no case should catalpa trees be pruned to a whip. All trees which become severely injured in any way, as by wind, fire, or animals, should be cut back to the ground without delay.

In case the trees have been planted as closely as 4 feet apart it will be necessary to commence thinning the plantation in about four to six years, and before any of the stems will be marketable except for stakes. If, however, a wider spacing has been used and proper care and attention given the plantation, thinnings will not be needed until eight to ten years after planting, when many of the trees will yield one or two posts each.

Between the ages of 15 and 20 the entire plantation may be cut clean for posts and a new forest allowed to start from the stump sprouts, or it may again be thinned and the best trees left standing to produce poles. If this latter plan is followed, however, the stump sprouts are likely to be less vigorous than if all the trees were cut.

In the Middle West the catalpa is often injured by strong, steady winds, which whip off the leaves, dry out the soil, and cause crooked and deformed growth. Plantations should, therefore, be protected by setting out several rows of hardier species along the exposed sides, a mixture of species being best. A good combination would be two rows of Russian mulberry or Osage orange adjoining the plantation with a row of cottonwood on the outside. The mulberry should be spaced 4 by 4 feet and the cottonwood 8 by 8 feet.

If protection from fires is necessary, it should be given by plowing a fire guard of half a dozen furrows around the plantation each year. If the plantation is large, it is better to divide it into blocks of 40 to 50 acres each by means of lanes 15 to 20 feet wide. These lanes should be kept plowed, so that fire can not spread from one block to another. This system also gives easy access to the interior of the plantation.

Soft rot of the catalpa can not be checked after a tree is infected, but proper treatment of the plantation will prevent it. Trees that are only partially rotten may be cut and used for posts, since the

fungus ceases to work as soon as the tree is cut. Methods of planting, cutting back, or pruning which produce a clean, straight growth of the tree free from low side branches give the fungus no chance to enter unless a wound is caused in some unusual way.

If the plantation is threatened by insect attacks, specimens should be sent to the Bureau of Entomology of the Department of Agriculture for identification and advice as to remedial measures.

RETURNS.

Catalpa has been planted under such a wide range of conditions that the returns have not been at all uniform. Profits from catalpa growing depend most upon the suitability of the planting site, upon proper spacing, and especially upon the cultivation and care of the plantation.

The following figures on the yield of hardy catalpa under a variety of conditions indicate in a general way the returns which may be expected from plantations:

Two plantations in Marion County, Mo., in which the trees were spaced 4 by 8 feet when set out, contained, respectively, 392 trees and 616 trees per acre at the end of twenty years. The average height of the trees in the first grove was 47 feet, with a diameter, breast high, of 7.5 inches; those in the second grove were 55 feet, with a diameter of 7 inches. The products per acre of the first grove were 1,568 first-class posts, 392 second-class posts, and 1.9 cords of fuel wood; of the second grove, 3,038 first-class and 616 second-class posts, and 4.8 cords of fuel wood.

A plantation in Sangamon County, Ill., in which the original spacing was 4 by 5 feet, contained at 21 years of age 800 trees, with a yield per acre of 1,920 posts, all first class, and 4.9 cords of fuel wood. The cost of establishing a plantation in Illinois under present conditions is about \$15 per acre.

A 17-year-old plantation in Washington County, Iowa, in which the trees had been set 4 feet apart each way, was found to contain 1,312 trees per acre over 4 inches in diameter breast high. The average diameter of these trees was 5.7 inches, and the estimated yield of the stand was 2,778 first and second-class posts per acre. The effect of the quality of the soil upon the yield of catalpa is well shown by a 21-year-old plantation in Iowa County, Iowa. The original spacing of the trees was 9 by 5 feet, and on good soil there remained 524 trees per acre which had a diameter of 4 inches or over breast high. The estimated yield was 1,896 posts and 96 poles.

A portion of the stand which was growing on a sandy knoll contained only 380 trees per acre, with a yield of but 572 posts.

A 25-year-old plantation in Nemaha County contained 747 dominant trees per acre, with an average diameter breast high of 6.6 inches, and an estimated yield of 1,829 first-class posts, 845 second-class posts, and 1.9 cords of wood.

In York County, Neb., which is near the western limit of the range for economic planting, a 21-year-old plantation contained 406 dominant trees per acre. The average diameter of the trees was 4.7 inches, and the yield was limited to 242 first-class and 140 second-class posts, and 0.4 cord of wood.

In a plantation in Pawnee County, Neb., the owner kept a strict account of all expenses incurred in establishing, maintaining, and harvesting his plantation, and of the final proceeds. The seedling trees, at \$1.15 per thousand, cost \$3.13 an acre; the preparation of the ground, planting, cultivating, and pruning cost \$18.46—a total of \$21.59 per acre. At 5 per cent. compound interest this was increased, in the sixteen and one-third years during which the plantation grew, by \$26.34. Cutting and marketing the crop added \$61.90 per acre to this, so that the full cost at the end of the experiment for the 20 acres was \$2,196.

The returns were:

31,397 third-class posts, at 5 cents.....	\$1,569 85
17,349 second-class posts, at 10 cents.....	1,734 90
4,268 first-class posts, at 12½ cents.....	533 50
270 first-class posts, at 15 cents.....	40 50
211 8-foot posts, at 20 cents.....	42 20
9 10-foot posts, at 25 cents	2 25
4 10-foot posts, at 30 cents.....	1 20
258 10-foot posts, at 35 cents.....	90 30
41 12-foot posts, at 40 cents.....	16 40
167 14 and 16-foot poles, at 50 cents.....	83 50
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Total for posts and poles.....	\$4,114 60
214 cords of woods, at \$5.25.....	1,123 50
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Total income from 20 acres.....	\$5,238 10

The total profit was, therefore, \$3,042.19, or \$152.17 per acre, equal, with allowance for 5 per cent. compound interest, to \$6.24 an acre.

RUSSIAN MULBERRY (*MORUS ALBA TATARICA*).

FORM AND SIZE.

The characteristic form of the Russian mulberry is low and bushy. When grown in the open very little of the trunk is free from branches, and even when grown in a close-spaced plantation severe pruning is required to produce a straight undivided trunk. On good soil the Russian mulberry usually attains a size of 30 or 40 feet in height and 1 foot in diameter.

RANGE.

The Russian mulberry is a hardy variety of the Asiatic white mulberry. It was introduced into the United States by the Russian Mennonites about 1875, and was subsequently distributed widely throughout the middle Western States. The range for its economic planting is southern Nebraska, southern Iowa, Kansas, Oklahoma, and Indian Territory. It can not endure the severe winters of the Dakotas; the leading shoots are occasionally frozen back in Kansas.

Where it has escaped from cultivation it occurs with the oaks and maples, preferring the bottom to the upland.

HABITS AND GROWTH.

The Russian mulberry will grow both on sandy and on clay soils, but does best on rich loam where the water table is from 10 to 15 feet below the surface. It will endure almost any amount of drought and neglect. Even in dry situations growth is fairly rapid. These qualities adapt it both to upland and valley situations in the semi-arid regions. It is decidedly tolerant of shade, and can therefore be used to advantage for under-planting or for mixing with a more rapid-growing species to increase the height growth and to induce natural pruning of the latter.

Height and diameter growth are fairly rapid. On very favorable sites a height of 20 feet and a diameter of 8 inches are not unusual for a tree 10 years old.

The tree has comparatively few enemies. It is not in any degree susceptible to the attacks of fungi, but the foliage is sometimes attacked by defoliating insects.

ECONOMIC USES.

The Russian mulberry serves a number of useful purposes. If close-planted and severely pruned, the Russian mulberry is useful for the production of posts and fuel. On favorable sites it will produce fence posts in ten to fifteen years. The wood is rather heavy, elastic, coarse-grained, and moderately strong. It splits easily and, when seasoned, makes a durable fence post, which is probably its most valuable use. The fuel value of the wood is high.

While the fruit is of an inferior quality, it is much used for domestic purposes in the absence of better kinds. Many horticulturists have established mulberry windbrakes around their orchards. The natural form of the tree makes it well suited to form a low, dense windbreak, if left unpruned. The windbreak, aside from its protective value, furnished food greatly relished by birds, and they are thus less likely to eat more valuable fruit in the orchard.

PROPAGATION.

Reproduction of the Russian mulberry takes place both by stump sprouts and by seed. Renewal after cutting is a simple matter; all that is necessary is to remove the surplus sprouts and give the best one a chance to develop. A quick-growing stump sprout will have better form than the original tree. Plantations can be started from cuttings, but propagation from seed is easier and produces better plants.

Fruit is borne abundantly. The seed may be separated by crushing and washing the berries. After drying, the seed should be kept in a cool, dry place until a week or ten days previous to sowing. The seed may be sown as soon as it ripens, but generally the better practice is to wait until the following spring, so that the seedlings will have an entire season in which to grow before the coming of cold weather. The seed should be sown in fresh, fertile soil, and covered not more than one-half inch. About one to two weeks are required for germination. Better results are obtained by mixing the seed with moist sand and keeping the mixture in a warm place until germination begins. The sand and seed can then be sown together on a well-prepared bed. The bed should be covered with one-eighth inch of sifted loam. The growth during the first season will be enough to bring the trees to proper size for transplanting to the permanent site the following spring.

PLANTING.

The Russian mulberry should be spaced close in plantation, in order to overcome, as much as possible, its inherent tendency to branched and crooked growth. For windbreaks, consisting of one or two rows, the trees may be planted at 2 or 3 foot intervals, and in plantations they may be spaced 4 by 4 feet or 4 by 6 feet. The Russian mulberry is found more often in mixed than in pure plantations. Its ability to thrive under partial shade makes it well suited for planting with light-demanding species, such as black locust, honey locust, black walnut, and green ash.

CULTIVATION AND CARE.

Cultivation should be thorough and continued until the ground is quite fully shaded. When the trees begin to crowd, the plantation should be heavily thinned. The trees remaining should then be pruned to a height of 8 or 10 feet.

WHITE ASH (*FRAXINUS AMERICANA*).

FORM AND SIZE.

In the forest the white ash is a tall, slender tree with a smooth bole, which is surmounted by a small open crown of stout upright branches. The bole is often free from branches for more than half its length. In the open the trunk usually divides a few feet above the ground into several main branches, which form a graceful rounded head, rather open and widest near the base. On the bottom lands of the lower Ohio Valley, where the best development is attained, the white ash occasionally reaches a height of 100 feet, though in general it is a tree of medium size, with an average height of from 70 to 80 feet and a diameter of from 2 to 3 feet. The roots penetrate deeply into loose soil, but where hindered by rocks or an impenetrable substratum they develop an extensive lateral system.

RANGE.

The natural distribution of the white ash is from Nova Scotia and Newfoundland to northern Florida, central Alabama, and Mississippi, and westward to Ontario, northern Minnesota, eastern Nebraska, Kansas, Indian Territory, and Texas (Trinity River).

It seldom occurs in large masses, but usually as single individuals or in groups among other hardwoods. The associate species in-

clude many of the common hardwoods, such as the maples, elms, basswood, birches, walnut, and oaks.

The range for economic planting is from the valley of the Wabash and Ohio rivers north and west through Indiana and Illinois to the region of the Great Lakes; westward through Iowa, southern Minnesota, and eastern South Dakota; southward through eastern Nebraska and Kansas into northern Oklahoma and Indian Territory. The white ash will undoubtedly prove a valuable tree for planting in the arid regions on irrigated lands now being opened for settlement.

HABITS AND GROWTH.

The white ash prefers rich moist soil. The bottom lands of river valleys in the mild climate of the west central portions of its range produce the finest trees. A plantation will do best in a protected valley, on sandy loam that is light and easily worked. The white ash will thrive, however, in less favorable or even in adverse localities. A porous subsoil is essential, and a water table at a depth of 10 or 12 feet is of decided advantage. For general planting in the semiarid region of the Middle West the white ash is not so hardy and should yield preference to the small green ash.

Mature trees can endure only a moderate amount of shade, while young seedlings will start in dense shade, but require considerable light for their perfect development.

The rate of growth is rapid when compared to that of most of the associated hardwoods, but varies materially according to conditions of moisture and situation. In the southern part of its range post timber may be grown in ten or fifteen years. In a drier climate, where conditions are not so favorable, from fifteen to twenty years are required for the average tree to attain post size. On dry prairies the trunk is not more than 5 or 6 inches in diameter at twenty-five years. Trees grown in a dense stand in the Farlington plantation in Kansas made an average annual height growth of 1.7 feet and a diameter accretion of one-fifth inch annually. This is very slow compared to the rate of growth of other trees under similar conditions.

White ash is attacked by a number of fungous parasites, which grow on the living leaves and do more or less injury. These parasites rarely appear in sufficient numbers to do very much harm to the tree affected. One specimen of fungus, which grows in the heartwood of the trunk and branches, changes the wood into a soft, pulpy, yellowish mass, unfit for lumber purposes. In regions

where this disease is common the ash never grows to be a very large or very old tree. In park or shade trees the disease may be prevented by coating wounds with an antiseptic substance such as coal tar.

White ash is also subject to insect injury. In case insects appear in numbers sufficient to do serious harm specimens should be sent to the Bureau of Entomology, where the insect will be identified and measures suggested for its control. Large trees are often doty at the base and sometimes have big heart cracks.

ECONOMIC USES.

The wood of the white ash is of great economic value. Wood from second-growth trees is usually more tough and elastic than that of the large, slowly grown first growth. Its most valuable qualities are strength and elasticity, and these combined with its ability to take a good polish and to season without injury make it a timber of first rank for furniture, car, and vehicle construction, interior woodwork, agricultural implements, and tools.

It is fairly durable in contact with the soil and is used for post timber. Because of its rapid growth, comparative freedom from disease, and ease of propagation white ash is certain to remain a favorite tree for ornamental planting. Where it thrives it is preferred to any other species of ash, but in regions of drought and extreme temperatures green ash should be selected in preference to white ash.

METHODS OF PROPAGATION.

Propagation is by seed, produced abundantly about once in three to five years, though individual trees along streams or in favorable open situations fruit more frequently. Natural reproduction is not abundant. The one-winged fruit ripens in October. It may be sown as soon as gathered or preserved for spring planting by stratifying in damp sand. If stratified, the seed should be mixed with about 3 parts of sand to 1 of seed and placed in a box in a cool cellar. Hand picking, although slow, is the most reliable method of collecting the seed, which can be gathered easiest from the low, open-grown, and most productive trees. Since the seeds of the several species of ash are similar in appearance, samples should be sent to the Seed Laboratory of the Department of Agriculture, where they will be identified and tested free.

Broadcast sowing of ash seed on prepared or unprepared ground, or planting in hills where the trees are to stand, is uncertain and

unsatisfactory; therefore nursery culture is advised. The nursery and seed beds may be prepared on any rich, well-worked soil, an old garden spot being an excellent place if the soil is not full of weed seeds. Planting may begin in the spring as soon as danger of frost is past. For convenience in weeding, it is recommended that the seed be sown in drills 8 to 12 inches apart for hand cultivation and 2 to 3 feet apart for a horse cultivator. Since the germination percent is low, the seeds should be dropped so thickly that they will touch each other in the row. They should be covered about one-half inch deep and the soil rolled firmly or pressed down by a board. During germination moisture conditions should be kept uniform and irrigation or sprinkling resorted to in times of drought.

PLANTING.

The seedlings should attain a height of 6 to 12 inches the first season, and may be transplanted to the permanent site when 1 year old. The question of spacing depends on locality. For plantations in the Middle West a desirable spacing is 4 by 6 feet; in regions of more abundant rainfall the trees should be 6 feet apart each way.

The white ash is adapted to both pure and mixed planting. Species suitable for planting with this tree are black walnut, black cherry, hackberry, hardy catalpa, Scotch pine, and European larch.

CULTIVATION AND CARE.

Cultivation should be thorough and frequent enough to keep out weeds and grass. The plantation should be tilled for at least three years or until most of the ground is shaded. As soon as serious crowding begins, thinnings should be made so that the trees remaining may have ample space for development.

BLACK WALNUT (*JUGLANS NIGRA*).

FORM AND SIZE.

When grown in the open the black walnut is a rather symmetrical tree, with a massive crown, short trunk, and a form similar to that of open grown oaks and chestnuts. In the forest the trunk lengthens into a tall, tapering column, often with no limbs for a distance of 50 or 60 feet, and surmounted by a much reduced crown. The foliage is thin, and never completely shades the ground. On the lower mountain slopes of the Carolinas a height of 110 feet and a diameter of from 5 to 6 feet is often attained. The usual height of the mature forest-grown tree is from 70 to 90 feet, and the diameter from 30 to 45 inches. Trunks of low, spreading trees in the open often measure over 6 feet in diameter.

RANGE.

Black walnut is one of the most widely distributed and valuable of our deciduous trees. In nature it grows sparingly from southwestern New England westward, through New York, Ontario, Michigan, and Wisconsin, to southern Minnesota, thence southward, with central Nebraska and Kansas as the western limit, to south central Texas and Florida. It does not appear along the Gulf or the South Atlantic seaboard, and is much more abundant in the Central than in the Eastern States.

Although of fair size wherever found, black walnut attains its best development in the deep hollows of the western slope of the southern Alleghenies, on the rich bottom lands along the Mississippi and Ohio rivers, and in Arkansas, Missouri, eastern Nebraska, Kansas, and Indian Territory. In the mountains of the Carolinas and Tennessee it occurs in mixture with oaks and chestnut, while in the original hardwood forests in the river valleys of Ohio, Indiana, Illinois, and Kentucky it is found associated with the maples, hickories, oaks, basswood, cherry, and other hardwoods of the region, though not always intermingling closely with them. West of the Mississippi the walnut is confined to river valleys and moist situations. In this western region it is found associated with the co-fectree, green ash, hackberry, basswood, and white elm.

The walnut is nowhere a gregarious tree, but usually occurs in scattered groups or as isolated individuals among other species. Within the limits of its range there are regions where it is almost unknown, while within a few miles it may be common, though conditions in both localities seem identical.

The natural range has been increased both to the east and west by planting. In Rhode Island, eastern Massachusetts, and southern New Hampshire and Maine the tree was probably not native, but has been planted in small quantities for its nuts, and grows well. In Iowa and eastern Nebraska plantations of black walnut have been successfully made. Plantations have been made as far west as Salt Lake City, southern Idaho, and throughout California, with evident success. In California the black walnut has been planted to a very limited extent for timber, to a greater extent for ornament and the yield of nuts. In the San Joaquin and Sacramento valleys the California black walnut, native to the southern part of the State, has been grown successfully instead of the eastern black walnut.

HABITS AND GROWTH.

The ideal conditions for growth are found in the rich, moist, soil of bottom lands or on fertile hillsides which are protected from cold, sweeping winds. A calcareous soil or a sandy loam, containing a large quantity of humus, overlying a deep subsoil of gravel and a water table in which the long taproots can find a continual supply of moisture, furnishes the best conditions for growth. The surface soil should be moist, but not wet, and the subsoil porous.

While not especially adapted to widely varying conditions, the black walnut will grow in many localities outside of its natural range; but its form and rate of growth are appreciably affected by its environment. Throughout the entire Middle West south of the forty-fifth parallel, planting on limited areas may be attempted with fair prospects of success on all fertile prairie land, and especially in coves, valleys, and extensive bottom lands where the requisite moisture is present and partial protection from the wind can be had. This latter requirement may be secured by starting the plantation in the lee of a natural wind-break or by planting a shelter belt of hardy, rapid-growing species on the exposed sides. The most favorable range for economic planting is in the fertile valleys of the Ohio and Mississippi rivers and their tributaries, and on the bottom lands of the Carolinas, Georgia, Tennessee, Kentucky, Missouri, eastern Nebraska, Kansas, and Oklahoma. On upland soils, especially in the West, where there is a stiff subsoil, the species makes slow growth. In the southwestern plains the dry, hot weather of summer is often injurious, while in Minnesota and the Dakotas the cold of winter often kills back the season's shoots.

The black walnut is intolerant of shade. The foliage of a walnut

plantation is thin, seldom shading the ground to such an extent as to prevent the growth of grass and weeds.

In good soil the rate of growth is fairly rapid and is continued up to mature age. In the best situations planted trees occasionally make a diameter growth of nearly an inch each year, but under average conditions an increase of one-fourth to one-third inch is all that may be expected. A tree 12 to 15 years old will begin to bear fruit, and lumber will be produced in forty to sixty years. Along the northern limit of its range it is somewhat susceptible to sun scald, and should be protected from the wind and sun by hardier species.

Many tree defoliators and borers attack the walnut, but seldom do serious damage, since they are mostly of local distribution, and the damage done by them is limited in extent. In case insects cause serious damage, specimens, accompanied by a full description of their work, should be sent to the Bureau of Entomology of the United States Department of Agriculture for identification and suggestion as to methods of control.

ECONOMIC USES.

The wood of walnut is heavy, hard, strong, and of coarse texture. The sapwood is narrow and whitish in color and the heartwood is a chocolate brown, which deepens with age and exposure. The wood shrinks moderately in drying, and if care is taken dries without checking. It works and stands well, takes a good polish, and is valuable as a cabinet wood. It is very durable in contact with the soil, as only the sapwood decays.

Walnut was formerly much used for furniture and interior finish, especially in churches; in cabinetwork, for gunstocks, tool handles, and carriage hubs, and to some extent in the construction of ships. Formerly more abundant, it was used for fence posts and made into shingles. At present the market is much better in Europe than at home, and large amounts are exported in the form of logs, 10 to 20 feet long and 15 to 30 inches square. However, 30,000,000 feet B. M. of walnut were sawed in this country during the year 1905.

The price of walnut lumber is little, if at all, higher than it was twenty-five years ago; about \$100 per thousand is paid for the best grades and \$50 to \$70 for medium grades. The average value of the lumber manufactured in 1900, as given by the last census, was \$37 per thousand. Logs of unusually fine grain sometimes bring high prices for veneer manufacturing.

Walnut under favorable condition will reach post size in from ten to twelve years. However, timber of this size contains so large a percentage of sapwood that it is not first class for fence posts. If durable fence-post material is desired, the rotation should not be less than twenty-five years, and forty years would be more profitable, since the trees must have time to mature a considerable amount of heartwood.

The greatest returns will be realized from this species when it is planted with a view to growing saw timber. If a walnut plantation is established for this purpose, it is advisable to underplant with some tolerant tree that may be cut with profit in twenty or twenty-five years, leaving the walnut as the permanent stand until merchantable size is attained. As this will require a period of about seventy-five years, extensive walnut plantations are not advisable unless a long-time investment is sought.

METHODS OF PROPAGATION.

Under natural forest conditions the black walnut does not reproduce readily, and becomes almost extinct wherever lumbered clear. The tree does not reproduce by suckers and only sparingly from stump sprouts; squirrels usually destroy many of the fallen nuts and young trees are killed by dense shade.

The nuts may be stored over winter by stratifying them in moist sand or leaves in a sheltered place out of doors. In stratifying, 3-inch layers of sand should alternate with single layers of nuts. Boards should be placed around the edge of this store of nuts and the top protected against burrowing rodents. The sand should be kept moist, and the whole mass allowed to freeze.

For extensive and satisfactory propagation of the species, artificial planting is the only sure method. Because of the long tap-roots and consequent difficulty in transplanting, nursery culture is in general not advisable. It can, however, be made successful if root pruning is practiced and great care taken in moving the plants. Nursery culture, if attempted, should be conducted as follows:

The nuts should be planted at 6-inch intervals in nursery rows 3 feet apart, and covered 1 to 1½ inches deep. A preliminary freezing of the nuts will be beneficial rather than injurious. The plants in one year should attain a height of 12 to 14 inches, and may be transplanted to the permanent site in the spring when 1 year old.

PLANTING.

The plants may be set in furrows, or in holes dug with a spade care being taken to keep the roots from drying out, and to pack the earth firmly around them. In general the better plan is to omit nursery culture altogether and plant the nuts in their permanent place in the plantation. Either fall or spring planting may be practiced, but spring planting is usually best.

In the East a furrow or a series of holes the proper distance apart will be sufficient for the reception of the seeds. On the plains and prairies of the West, greater care in preparing the soil is essential. The sod should be broken, and the ground put in corn or some other common crop for one or two years. The nuts may then be planted in the spring in shallow furrows and covered with a plow to a depth of 2 or 3 inches and the ground well firmed down. The rows should be straight in at least one direction, to facilitate cultivation. The spacing will vary in different localities. An interval of 6 or 8 feet apart each way is recommended.

Since the black walnut is a long-lived, light-demanding tree, it may with advantage be combined in the plantation with a more heavily foliated species. The associate trees should be allowed to grow until they clear the lower limbs from the walnut and stimulate it to a rapid upward growth, when they should be removed and the long-lived species left to finish its growth alone. Desirable trees for such a mixture are the hardy catalpa, hackberry, Osage orange, and boxelder. When the walnut and another species are thus combined, the walnut should be given two to three years' start in order that it may not be overtopped.

CULTIVATION AND CARE.

The plantation should be cultivated until the tops of the trees meet. During the first three years corn may be grown between the rows to give additional returns from the soil.

YELLOW POPLAR (*LIRIODENDRON TULIPIFERA*.)

FORM AND SIZE.

The mature, forest-grown yellow poplar, or tuliptree, has a long, straight, cylindrical bole, clear of branches for at least two-thirds of its length, surmounted by a short, open, irregular crown. When growing in the open the tree maintains a straight stem, but the crown extends almost to the ground and is of conical shape.

Yellow poplar ordinarily grows to a height of from 100 to 125 feet, with a diameter of from 3 to 6 feet and a clear length of about 70 feet. Trees have been found 190 feet tall and 10 feet in diameter.

RANGE.

Yellow poplar is distributed sparingly through southern New England and New York; it is more plentiful on the southern shore of Lake Erie and westward through northern Indiana and Illinois. It extends southward into Alabama and the other Gulf States as far as northern Florida. West of the Mississippi it is rare, except in northeastern Arkansas and southeastern Missouri. It is most abundant and of largest size in the south central part of its range, especially in Tennessee, Kentucky, and the western Carolinas, and in the basin of the Ohio River and its tributaries. It is characteristic of the distribution of yellow poplar that it is scattered by single trees or in groups throughout the forest, and is rarely the predominant tree except in the South, under especially favorable conditions. It is commonly associated with chestnut, the oaks, walnuts, hickories, maples, black cherry, locust, and beech; and is occasionally found with hemlock and white pine.

The tree is hardy east of the Mississippi, except in the colder portions of the Northern States; and, on suitable soils, may be planted throughout its range.

HABITS AND GROWTH.

Yellow poplar is very exacting in soil and moisture requirements. It demands deep, fertile, well-drained soil and a constant and even supply of soil moisture. The tree grows best on moist loam or rich sandy soil in which is mixed a considerable quantity of humus. It does not thrive on heavy clay or dry ridge soils, and can not grow in standing water. In its early life it requires a fresh, porous, upper soil. The largest specimens are found in protected coves along

water courses and on the northern and eastern slopes of ravines and valleys.

The tree is very intolerant and prunes itself well with even moderate side shade. While the seedlings can endure considerable shade, the trees demand more light as they grow older, and at maturity are nearly always taller than their associates, with their crowns fully exposed.

In early life the growth is principally in height, and the development of one continuous main stem is characteristic throughout. The growth is rapid and the tree often lives more than three hundred years; during the first forty or fifty years the height growth is from 1 to 2 feet annually, and the average diameter growth from one-tenth to one-fourth inch. After fifty years the rate of growth gradually decreases.

Yellow poplar is very susceptible to injury by fire. Old trees are often hollow-butted as the result of repeated burning about the base. Near the western limits of its range the tree is sometimes injured by sun scald.

Injuries by insects should be reported to the Bureau of Entomology, United States Department of Agriculture.

ECONOMIC USES.

The wood is usually light, but varies in weight; it is soft, tough, but not strong, and of fine texture. It is fairly durable when exposed to the weather or in contact with the ground. It shrinks slightly and seasons without injury, and works and stands exceedingly well. The sapwood is thin, light in color, and decays rapidly. The wood is used for siding, paneling, and interior finishing, and in the manufacture of toys, boxes, culinary woodenware, wagon boxes, carriage bodies, slack staves and heading, and backing for veneer. It is in great demand throughout the vehicle and implement trade, and also makes a fair grade of wood pulp.

With the diminution of the white-pine supply yellow poplar is much used in its place. The lumbermen recognize two kinds of poplar timber, white and yellow. The difference in color is caused mainly by the difference in site conditions, since trees grown on dry, gravelly soil produce a wood that is lighter in color and harder to work, and is called "white poplar" or "hickory poplar." The "yellow poplar" is grown on rich alluvial or limestone soil, and has a rich yellow heartwood which is highly prized because of its fine grain and easy working qualities.

Yellow poplar is an excellent tree for shade and ornament, and is especially suited to these purposes in cities where bituminous coal is burned. Forest planting of this species for economic purposes has never been attempted, but it should prove profitable wherever natural conditions are favorable, because of the rapid growth of the tree, its large size and splendid form at maturity, and the value of the wood.

METHODS OF PROPAGATION.

Yellow poplar reproduces itself almost entirely by seed. Its ability to sprout from the stump is very limited, and can not be depended upon.

Seeds are produced abundantly nearly every year, though only from 5 to 10 per cent are fertile. They are borne in a cone-like fruit 1 to 2 inches long. Young trees are likely to produce seed which is absolutely worthless, and on older trees good seed is found only in the centers of the cones on the highest limbs. Seed should be collected in the fall when mature, and may be sown at once or stratified in sand for spring planting. It is advisable to plant in the fall; germination will then take place the following spring. If sown in the spring the seeds have a tendency to lie in the ground a year before germinating.

The use of nursery-grown seedlings or transplants is recommended for establishing plantations of yellow poplar. Sowing in the permanent site, however, is occasionally successful.

To grow nursery stock the seed should be sown thickly in drills, in light, rich, sandy soil and covered to a depth of one-half inch. It is especially important that the soil be kept evenly moist. More water should be supplied during the germinating period than later. It may be found necessary to provide partial protection on hot, sunny days during the first season, especially in the South. Seedlings may grow in the nursery for one or two years, but should not remain longer, because of the strongly developed taproot and few lateral roots, which make transplanting difficult. Transplanting 1-year-old seedlings into nursery rows will stimulate the development of fibrous roots and insure vigorous plants, but this operation is not generally advisable, because of the added expense. If seedlings are left for more than one year in the seedbed they should be cut back to the ground before being moved. Vigorous sprouts will then replace the stems.

PLANTING.

Seedlings reach suitable planting size in one year, and should be transferred to the field very early in the spring, before the buds start. They should be spaced 6 feet apart each way. No preparation of the whole site prior to planting is needed, except where there is a tough sod. In this case the ground must be broken and the grass turned under if possible; otherwise the sod should be removed from a small area where a tree is to be placed.

Yellow poplar is not well adapted for planting in pure stands, but should be mixed with other deciduous species. Unless the other trees in the mixture are slow-growing it must be given a start, so that it will not be overtopped. If the plantation is in a sheltered valley or rich bottomland, yellow poplar may be planted as the predominant tree of the mixture. In more exposed situations the species with which it is planted should be in excess, to provide protection from high winds and frost.

Any moderately shade-enduring hardwood may be planted with yellow poplar, or mixture with white pine and Norway spruce should also prove suitable.

CULTIVATION AND CARE.

Yellow poplar will rarely be planted on tillable land, so that cultivation in most cases will be impossible. Ordinarily young trees will not be choked out by grass or weeds because of their rapid growth. When field sowing of the seed is practiced, however, it may be necessary to check the weeds for the first two or three years.

No grazing should be allowed in the plantation and fires should be absolutely kept out, since the yellow poplar, even when mature, is very easily injured by fire.

Quantity and Character of Creosote in Well-Preserved Timbers

BY GELLERT ALLEMAN.

{Professor of Chemistry in Swarthmore College.

INTRODUCTION.

The practice of preserving timber by impregnating it with anti-septics is spreading rapidly in the United States. Engineers and business men are recognizing more and more fully that, largely because of the increasing scarcity of good timber and its higher price, timber preservation is a paying investment.

Of the various preservative processes which have been devised, those using coal-tar creosote have proved the most efficient. In the long run they are also frequently the most economical, the longer service offsetting the greater first cost as compared with processes using metallic salts. Moreover, creosoted wood can be used for some purposes, as for piles set in salt water, for which wood treated with metallic salts is but slightly more durable than untreated timber.

Recent reports on the service of creosoted railroad cross-ties, and of piles placed in salt water, have clearly shown that, while proper treatment gives remarkably good results, much of this timber was not properly treated and has not lasted as it should. On the other hand there is abundant evidence that the growing use of creosote, and the fact that creosoting means the investment of considerable capital in the expectation of a good return through the increased life of the timber, makes it imperative that we should know, as completely as possible, just what constitutes efficient creosote treatment.

The efficiency of treatment will depend on three things—the amount of creosote, its character, and the thoroughness with which the timber is penetrated. The proper amount of creosote will depend upon the intended use of the timber. Piles, for instance, which must resist the attacks of marine borers, need more creosote than telephone poles; and piles in warm waters require more than those in cooler waters. The sort of creosote best suited to prevent decay and the inroads of marine borers can be ascertained only by

many careful experiments. The proper means for securing a maximum penetration is an engineering problem, complicated by many factors, such as the differences of wood structure or the moisture content of the timber.

There are many ways of approaching this problem. One of the most promising is a study of the nature of the creosotes present in timbers which have given long service. The results of a series of analyses of the oils present in such timbers forms the most important part of this paper. A brief account of the source and composition of coal-tar creosote precedes the description and discussion of the experiments.

MANUFACTURE AND COMPOSITION OF CREOSOTE.

SOURCE AND COMPOSITION OF COAL TAR.

When certain varieties of coal are heated in an oven or retort, in the absence of sufficient air for their combustion, the coal is decomposed and gas, tar, and coke are formed. The gas and tar rise from the heated mass and the coke remains in the retort. Coke and illuminating gas are manufactured in this way. Where coke is the main product the "beehive" oven is used and the gas and tar are not collected, but when the volatile materials are to be collected the "by-product" oven is used. In making illuminating gas the coke and tar are regarded as by-products, and one of the problems of management is how to dispose of these by-products advantageously.

Coal tar is an extremely complex mixture of organic compounds of which the composition is by no means constant, but varies not only with different coals but also with different treatments of the same coal. The same coal will yield at the same plant various qualities of coke, gas, and tar, depending on the amount of heat applied, the quantity of air admitted, and the season of the year. When a low heat is applied a relatively small amount of gas and tar is evolved and the tar contains large quantities of compounds belonging to the paraffin series. On the other hand, with a high temperature much larger amounts of gas and tar are obtained and the predominant compounds of the tar, in nearly all cases, are those belonging to the aromatic series, such as benzene, toluene, phenol, naphthalene, anthracene, etc.

THE PRODUCTION OF CREOSOTE FROM COAL TAR.

The first distillation of crude tar, in which several separate fractions are usually taken, is made in large iron retorts holding from 10 to 30 tons. The forms of the retorts and the manner of con-

trolling the distillation vary more or less in different works. In some cases the still is provided with a thermometer inclosed in an iron tube screwed into the still head; in other cases the time for changing the receiver for various fractions is judged solely by the specific gravity and other properties of the distillates. The separation aimed at is more or less accurately attained in both ways.

In Germany the fractions are frequently taken as follows: The temperature is that registered by the thermometer in the tar at the beginning of the distillation, but free from the oil and indicating the temperature of the vapor passing over when anthracene oil begins to distill.

First light runnings up to.....	110° C.
Light oils	110° to 210° C.
Carbolic oils	210° to 240° C.
Heavy or creosote oils.....	240° to 270° C.
Anthracene oils	270° to 400° C.

At many English works the following fractions are taken with the thermometer placed as in the German procedure just cited:

Light naphtha up to.....	110° C.
Light oil	110° to 170° C.
Carbolic oils	170° to 225° C.
Creosote oils	225° to 270° C.
Anthracene oils	270° to 360° C.

These temperatures are by no means universally accepted in the respective countries, and one or more fractions are often omitted; when, for example, it does not pay to extract carbolic acid, or when the demand for anthracene is limited.

Owing to the variable constitution of the tar and to the different temperatures between which fractions are taken, the products of this preliminary separation are frequently widely different in physical character and chemical composition.

In distilling according to the German method given above, the "first runnings" and "light oils" contain, among other things, benzene, toluene, and the xylenes; the "carbolic oils" contain phenol, the cresols, and some naphthalene; the "creosote oils," small quantities of phenols, naphthalene, anthracene, and many other hydrocarbons; the "anthracene oils," anthracene, acridene, etc. The residue in the still is either soft or hard pitch, according to the point at which the distillation is stopped. When the anthracene oil is completely distilled the residue is largely hard pitch or carbon, and this is used as a briquette binder and in the manufacture of electric light carbons. When the distillation is stopped at

an earlier stage soft pitch is obtained which contains a considerable quantity of the high-boiling tar constituents, and is used for roofing and for builders' papers.

At present there is almost no market in America for hard pitch, whereas the demand for roofing pitch is very great. This demand for soft pitch, together with the lack of an American market for anthracene, explains why the distillation of tars is not carried so far here as it is at some of the foreign works.

STATISTICS OF THE PRODUCTION AND IMPORTATION OF CREOSOTE.

In 1898 there were produced at gas works in the United States 24,384,798 gallons of coal tar, valued at \$902,400, or 3.7 cents per gallon. In the same year about 4,023,000 gallons of coal tar were produced by 520 "by-product" coke ovens, the total product for the year being 28,407,798 gallons.*

In 1903 the total amount of tar produced amounted to 62,964,393 gallons, valued at \$2,199,969, or 3.49 cents per gallon. This includes the tar produced at 1,956 "by-product" coke ovens. There are no reliable figures showing what part of this total was produced at these "by-product" ovens, but the amount of coal coked at such ovens in that year was 2,605,453 tons.* The average yield of tar per ton of coal for the year 1903 was a little over 10 gallons.* The averages for the gas works and by-product ovens, separately, however, differ from the general average, the former for that year being about 12.5 gallons per ton and the latter about 8.5 gallons. Therefore it follows that approximately 22,150,000 gallons of coal tar were produced at "by-product" coke ovens in the United States in 1903. This leaves approximately 40,800,000 gallons as the production of gas works for this year.

In 1904 the total production of coal tar amounted to 69,498,085 gallons, valued at \$2,114,421, or 3.04 cents per gallon. Of this amount 27,771,115 gallons were produced in "by-product" coke ovens and 41,726,970 gallons at gas works.*

In 1905 the total amount of tar produced was 18,022,043 gallons, valued at \$2,176,944, or 2.73 cents per gallon. Of this amount, 36,379,854 gallons were produced in by-product coke ovens and 43,642,189 gallons at gas works, so that the output of by-product coke ovens increased considerably over that of the previous year, while the output of the gas works remained nearly stationary.*

No reliable figures are obtainable showing how much coal tar is distilled in this country. Practically all of the by-product tar is

*Annual Reports, U. S. Geological Survey

distilled and approximately one-half of the total tar made at gas works. It is safe to say that at least 40,000,000 gallons of tar were distilled in the United States in 1903. If, then, we assume that the average coal tar produced in this country contains at least 10 per cent of oils which can be used as, or added to, creosote oil, it follows that the production of creosote-oil in the United States in 1903 was approximately 4,000,000 gallons.

Making similar estimates from the statistics of the production of coal tar in 1904 and 1905, it is safe to say that at least 4,850,000 gallons of creosote oil were produced in this country in 1904 and at least 5,800,000 gallons in 1905.

In 1903, 3,711,565 gallons of creosote oil, valued at 5.8 cents per gallon, were imported into this country. In 1904 the importation amounted to 3,783,472 gallons, valued at 6.3 cents per gallon. In 1905 it was 7,750,531 gallons, valued at 5.4 cents per gallon.*

It would therefore appear that about 7,700,000 gallons of creosote oil were used in this country in 1903 for the impregnation of timber, that in 1904 the amount used was approximately 8,650,000 gallons, and that in 1905 approximately 13,550,000 gallons were used.

COMPOSITION OF COMMERCIAL CREOSOTE.

Technically speaking, the fraction of oil passing over between 240° C. and 270° C. during the first distillation of the crude coal tar is known as "creosote oil," "heavy oil," or "dead oil of coal tar." In practice, however, the oily residues which remain after extracting carbolic acid, naphthalene, and anthracene from the various distillates in which they occur are added to the creosote oil, and, in consequence, many of the creosote oils of commerce contain considerable amounts of materials having boiling points higher than 270° C. and lower than 240° C. As a matter of fact, it is the practice at nearly all distilling plants to add to the "creosote well" or tank all those oils and residues which can not profitably be worked over and used to greater commercial advantage.

The solvents which are used in the purification of naphthalene and of anthracene are sometimes added to the "creosote well," and this accounts for the occasional presence of paraffin oil in creosote.

The "creosote well" or tank is usually constructed of steel plate, and is fitted with inclosed steam coils at the bottom, in order that the solid materials crystallizing out can be melted before the oil is delivered to tank cars, tank steamers, or barrels. A stirring device is also frequently made use of to secure uniformity in the quality

* Annual Reports of Commerce and Navigation for 1904 and 1905, Department of Commerce and Labor

of the supply obtained from any one storage tank from which frequent deliveries are made.

The creosote oil of commerce contains phenol (carbolic acid), the ortho, meta, and para cresols, naphthalene, the *a* and *B* methyl-naphthalenes (the former being a liquid, the latter a solid melting at 33° C.), anthracene, phenanthrene, acridene, and small quantities of certain high-boiling bases and acids. When first distilled, creosote has a distinctly fluorescent appearance, and is light green in color. There is strong evidence for the belief that some of the individual constituents in creosote oil combine with each other and probably form new products.

At certain works carbolic acid is extracted, and the creosote oil coming from such places is low in "tar acids;" at other places, naphthalene is of considerable commercial importance, and the creosote oils obtained from these works contain little naphthalene. Usually anthracene separates with naphthalene, and in the event that the latter is frozen out, the former is also lacking in the oil which is placed on the market. In America the creosote oils usually contain large amounts of naphthalene, very small amounts (about 5 per cent) of phenols or cresols, and practically no anthracene. Little anthracene oil is found in the average specimen of creosote oil made in the United States for the reason already mentioned, namely, that in forcing the distillate to a temperature at which anthracene oil passes over, the soft pitch is ruined for roofing purposes, and a hard pitch, which is of practically no commercial importance in this country, is obtained.*

It is evident that these variations in manufacture result in creosotes differing greatly in physical and chemical properties. Some commercial creosotes are rather thin oils, some are almost entirely solid with naphthalene, and some are heavy oils with a large proportion of high-boiling constituents.

The different sorts of oils are believed to have different preservative values when injected into timber, but there is, unfortunately, a lack of uniformity in opinion. Some investigators have advocated oils rich in phenols, some those containing much naphthalene, some those containing a maximum of the high-boiling compounds. But little has been published on the subject.

* For a more extended discussion, see Lunge's Coal Tar and Ammonia.

ANALYSES OF THE CREOSOTE EXTRACTED FROM TIMBER WELL PRESERVED AFTER LONG SERVICE.

To determine what is, in fact, a good oil, a natural way is to examine the composition of those oils which have protected treated timber satisfactorily. This can be done by extracting and analyzing the oils from timbers the exact history of whose service is known.

The writer secured from various sources a number of creosoted timbers which had been in varied and extended use under markedly different climatic conditions. The method of extracting and analyzing the oils from these timbers is given below.

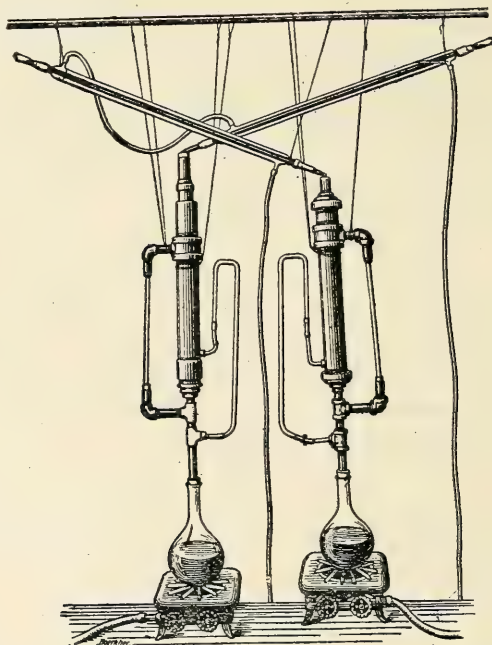


FIG. 1.—Apparatus for extracting creosote from wood cuttings.

METHOD OF EXTRACTING CREOSOTE FROM TIMBER.

As soon as a specimen of creosoted wood was received it was placed in a turning lathe, and cuts about 0.02 inch in thickness were made with a sharp tool, the lathe running slow enough to prevent the generation of such heat as experience showed would volatilize the oil. If the specimen was too small for the lathe, borings were made with a 1-inch auger. In every case, however, the

volume of wood worked up into a fine condition for extraction was accurately determined.

The cuttings or borings were then placed in large extractors (fig. 1), and extracted with absolute alcohol, and subsequently with anhydrous benzene. To prevent the iron of the extractors from combining with the tar acids, their interior was heavily lined with pure tin, a metal which experiment showed to be unaffected by tar acids. When the extraction was complete, the extract was filtered and the alcohol and benzene were distilled off in turn. In this removal of the solvents, use was made of a large Hempel column filled with glass beads, or of a Le Bel and Henninger tube. It was found that when these aids to fractionation were not used naphthalene would volatilize with the vapors of alcohol and benzene.

The only troublesome materials which this extraction could remove from the wood, and so contaminate the creosote, were the eleo-resins. Although it is possible to separate these compounds from creosote, this involves more error than disregarding them entirely.

The amount of oil obtained from each specimen is stated in terms of anhydrous creosote per cubic foot of timber. The actual cubic content of each specimen analyzed was accurately determined, and this, together with the weight of creosote oil obtained from it, formed the only basis of the calculations employed. The result of the estimation of the content of creosote was confirmed in every case by an analysis made in the ordinary glass Soxhlet extraction apparatus. The results obtained with the two sets of apparatus agreed to within less than one-half pound to the cubic foot. The results given in the table on pages 14 to 16 are the average of the two determinations.

METHOD OF ANALYZING THE EXTRACTED CREOSOTE.

The analytical tests commonly believed to give the most information concerning creosote were applied to the extracted oils. A fractional distillation is the most important of these tests. The extracted creosotes were therefore fractionated, and when the precipitates of solid naphthalene and of anthracene oil* were noticeably large the amounts of these deposits were determined. The percentage by volume of tar acids was also estimated. The specific gravity was not determined, since a very slight admixture of resin causes a marked change in specific gravity.

* Anthracene oil is here used in the commercial sense; its oil contains other solids besides anthracene.

FRACTIONAL DISTILLATION.

Of the different methods used in analyzing the extracted oils, the one selected, after a series of preliminary tests, appeared best suited for the work in hand.

Figure 2 shows the apparatus used in making fractional distillations.

The distilling vessel was the side-neck flask of Jena glass. The outlet tubes of the flasks used were placed rather below the middle of the neck, and, to insure a good condensation and prevent the ignition of the first part of the distillate, these delivery tubes were 40 cm. long. Retorts were not used because the fractions obtained from these vessels are much less sharply defined. In place of the

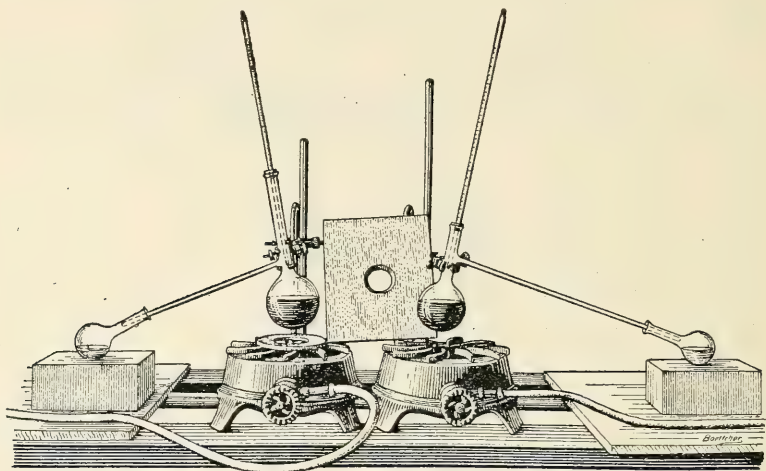


FIG. 2.—Apparatus used in making fractional distillations.

usual Bunsen burner, a Rogers burner was employed, as the flame is under better control and the contents of the distilling flask less likely to bump or froth. During distillation the flask was placed on a thick asbestos board through which a hole about $1\frac{1}{2}$ inches in diameter had been cut. This asbestos sheet prevented the radiation of heat from the burner to the thermometer. A mica shield was placed around the distilling bulb whenever protection from draft was necessary.

The thermometers used were made of Jena normal glass and filled with nitrogen. To guarantee their accuracy, they were carefully compared with a set of Anschütz standard thermometers. They were always so placed that their bulbs were just below the

outlet tube, so that the temperature recorded at any moment was that of the vapors passing over.

Two hundred and fifty grams of oil were used for each distillation. The fractions were caught in small flasks which had been previously cleaned, dried, and weighed. The amount of each distillate was determined by a second weighing taken after the fraction had cooled.

When a complex mixture such as creosote is distilled the various distillates passing over do not volatilize at the exact boiling point of the individual compounds which they contain, and the compounds can not be separated in the pure state except by repeated distillations. If all creosote oils were similarly constituted, then, by means of a series of analyses, it could readily be determined at what temperatures the various constituents volatilize; but since oils vary greatly in composition, this is not possible; such temperatures as are determined upon for the separation of the various fractions are, in a measure, arbitrary. For instance, if an oil is rich in naphthalene and also contains a certain amount of material distilling below 200° C., some of the naphthalene is liable to volatilize with the lighter oil, and it will have entirely passed over when a temperature of 245° C. is reached. On the other hand, if the oil contains a large amount of the higher-boiling constituents, such as anthracene, and also a considerable amount of naphthalene, the latter is frequently not gotten rid of before a temperature of 250° C. is reached. The point at which naphthalene ceases to come off, if it is present, can be determined by allowing a drop of the distillate supposed to contain it to fall on a piece of cold porcelain. If the drop solidifies, the presence of naphthalene is shown.

In over 800 distillations conducted by the writer it was found that 92 per cent. of those oils which contained naphthalene gave it off between 205° C. and 245° C., and one of the fractions has consequently been taken between these temperatures.

After conducting tests on a great many oils the writer was of the opinion that the most information could be obtained by separating the distillates as follows:

- | | |
|-----------------------|--------------------------|
| 1. To 170° C. | 5. 270° C. to 320° C. |
| 2. 170° C. to 205° C. | 6. 320° C. to 420° C. |
| 3. 205° C. to 245° C. | 7. Residue above 420° C. |
| 4. 245° C. to 270° C. | |

Fraction No. 1 contains the light oil and water. In case much water is present some of the naphthalene will frequently volatilize with it.

No. 2 should contain phenol and the cresols.

No. 3 contains naphthalene and the two methylnaphthalenes; these bodies crystallize out, and by filtration the amount of solid naphthalene can be determined.

No. 4 contains, among other compounds, dimethylnaphthalenes.

No. 5 was usually entirely liquid on cooling, and its composition is complex and variable. In case little anthracene oil is present, some of it will be found in this distillate.

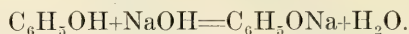
No. 6 usually contains anthracene oil, phenanthrene, acridene, etc., and solidifies on cooling.

the residue above 420° C. may contain practically the same as No. 6, and also tar.

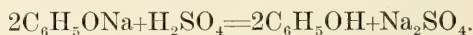
DETERMINATION OF TAR ACIDS.

“Tar acids” is a technical term used to denote all those creosote constituents which contain hydroxyl groups. The known compounds of this sort occurring in creosote are phenol or carbolic acid; the ortho, meta, and para cresols, usually termed cresylic acids; α and β naphthol, and the xylenols.

The method of estimating the tar acids is based on the following reactions: When a phenol—as, for example, carbolic acid—is treated with sodium hydroxide solution, the water-soluble sodium phenolate is formed, thus:



On treating this sodium phenolate with a mineral acid the salt is broken up and the original phenol recovered, thus:



In using these reactions to estimate tar acids in creosote it is convenient to distill 100 cm³ of oil until a temperature of 420° C. is reached, collecting the distillate in one vessel. This oil is extracted with 40 cm³ of sodium hydroxide solution of 1.15 specific gravity, the mixture being warmed and frequently shaken. The oil and the aqueous solution are separated in a separatory funnel, and a second and third extraction made, using 30 and 20 cm³, respectively, of the sodium hydroxide solution. The three alkaline extracts are united in a 200 cm³ graduated cylinder, and the solution is acidified with dilute sulphuric acid. The mixture is then allowed to cool and the volume of tar acids noted.

RESULTS OF THE ANALYSES.

The results of the analyses of the creosote extracted from 37 different samples of wood are given in the Appendix. The majority of these samples were obtained from various English companies using creosoted wood. Such details as could be learned concerning the history of the timbers are given in the footnotes.

A clearer comprehension of the analytical results may be had by dividing the timbers into several classes and comparing the average figures in the various groups. The 37 samples may be divided into six classes: Railroad ties, including eighteen English samples and one American sample; English piles; American piles; paving blocks showing good service, two English and two American; one sample of American paving block showing poor service, and one conduit pipe. The average results in each of these groups and the general average of all the well-preserved timbers are given in the table below:

Analyses of extracted oils.

Samples.	Average service.	Creosote to the cubic foot	Distillation of extracted oil.								
			To 205°.	205° to 245°.	245° to 270°.	270° to 320°.	320° to 420°.	Residue above 420°.	Solid naphthalene from distillates.	Solid anthracene oil from distillates.	Tar acids.
	Years.	Pounds.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Cm ³ .
19 cross ties. . .	21.84	9.58	0.025	12.07	13.88	23.80	24.69	25.27	1.19	23.47	0.65
6 English piles.	43.00	9.19	.46	16.92	15.31	21.06	22.77	23.04	.....	19.95	.61
6 American piles.	20.20	15.64	.57	30.28	15.82	18.49	13.21	21.43	25.93	43.27	.....
4 paving blocks	23.60	15.70	.29	21.34	21.39	18.73	19.40	18.64	12.52	40.40	.52
1 paving block, poor service..	9.00	5.77	9.62	14.41	19.27	41.74	11.23	3.40	.....	.....	.....
1 conduit pipe..	14.00	8.74	5.08	27.23	10.46	27.68	19.03	9.93	23.17	14.28	.....
Average of 36 timbers giving good service.	24.90	11.18	.36	17.37	15.18	22.00	21.71	23.09	6.98	27.81	.50

DISCUSSION OF THE ANALYTICAL RESULTS.

QUALITY OF OIL FOUND.

The average figures show that the quantity of creosote in these long-service timbers was not excessive. It is an unfortunate circumstance that we know practically nothing of the amount of oil which was injected into the various samples. Six of the ties, Nos.

8, 9, 104, 106, 109, and 113, were said to have received $2\frac{1}{2}$ (English) gallons of creosote each. Assuming that the creosote had a specific gravity of 1.05, and that the ties contained at least $2\frac{1}{2}$ cubic feet of wood, it would appear that these timbers received 10.50 pounds of oil to the cubic foot. The average amount present was 8.56 pounds.

The American piles show a much higher content of oil than the English samples. It should be noted that the American piles were all set in warm water, those farthest north being on the Virginia coast.

There is a considerable contrast between the quantity of oil present in the paving blocks which gave good service and the sample which was short lived. It is impossible to say which was the more important factor in determining this difference in service—the quantity or the quality of the injected creosote. Very likely it was a combination of both factors.

In general the results tend to show that 10 pounds of creosote per cubic foot is ample for railroad ties, and that piles require from 10 to 20 pounds, according to the location in which they are to be placed. If a creosote contains much light oil, a proportionately larger quantity must be used.

CHARACTER OF THE EXTRACTED CREOSOTE.

A difficulty in the proper interpretation of the results of the analyses arises from our ignorance of the quality of the oil used in treating the various timbers. It is, therefore, possible to believe that the materials which have volatilized from the timbers have created an antiseptic environment which has been a most important factor in preserving the wood.

Notwithstanding this legitimate query concerning the possible efficacy of the substances which has disappeared, the analyses furnish a strong argument in favor of the use of heavy oils. Tie No. 112, for example, had seen but fourteen years' service, two-thirds the average of the ties, and doubtless would not have suffered decay for many years to come, yet it does not contain more light oil than the average of the tie group, but, on the contrary, the creosote from this specimen was over half recovered as solid anthracene oil. If the constituents present in the timbers represented a nonefficient residue from which the effective light oils had evaporated, we should expect to find a relatively high proportion of light oils in this tie which had seen a shorter term of service. The natural interpretation of the results is that it is the heavy, high-boiling com-

pounds which stay in timber and are an efficient barrier to the entrance of water and to the attacks of fungi and borers.

The creosotes recovered contained practically nothing which boiled below 205° C. The general average shows that 32.9 per cent. of the oils distilled below 270° C. and 66.95 per cent. above—that is, two-thirds above and one-third below this rather high temperature. Another noticeable fact is the large amount of solid anthracene oil recovered from the distillates of many samples, the highest being 57 per cent.

A distinctive feature of the creosotes from American piles was the quantity of naphthalene which they contained. The average from this class of timbers was nearly 26 per cent., and one sample showed over 48 per cent. It appears probable that the creosotes used in treating these timbers contained much more naphthalene than the oils applied to the English piles. The results indicate that this substance possesses value for timber treatment, although it probably is inferior to anthracene oil. It is worth noting that these long-lived American piles contained more anthracene oil than naphthalene.

Perhaps the most striking thing is the disappearance of the tar acids. It is certainly conservative to place the original tar-acid content at 5 per cent. Yet the extracted oils showed but a tenth of this amount. It is possible that these compounds, on account of their hydroxyl groups, have undergone chemical changes during the many years that they have been exposed to varying amounts of water and air, to the reactive lignin portion of the wood, and to the numerous compounds present in creosote. On the other hand, these phenol bodies may have volatilized or been washed from the timbers.

It appears, therefore, that light oils, boiling below 205° C., will not remain in timber, but that heavy oils, containing a high percentage of anthracene oil, will remain almost indefinitely and protect the wood from decay and boring animals. It is probable that naphthalene stays in wood for many years, but whether it is as valuable as anthracene oil is open to question. The value of the tar acids has apparently been overestimated by many persons, for although it has not been proved that they are valueless, they have been shown to possess poor staying qualities.

APPENDIX.

RESULTS OF ANALYSES.

Analyses of extracted oils.

Sample.	Source.	Species.	Service.	Creosote per cubic foot.	Distillation of extracted oil.						Solid naph- tha- lene from distil- lates.	Solid an- thra- cene oil from distil- lates.	Tar acids.	
					To 205°	205° to 245°	245° to 270°	270° to 320°	320° to 420°	Resi- due above 420°				Total.
			Years.	Pounds.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Cm ³	
Tie No. 106.	Glasgow and Southwestern Ry., Scotland.	Pine.	16	4.06	16.32	13.24	20.15	24.10	25.93	99.74	32.15	0.51		
Tie No. 104.	do.	do.	18	9.24	9.37	18.17	27.54	21.38	23.01	99.47	51.07	.36		
Tie No. 113.	do.	do.	18	8.01	9.75	18.54	24.96	22.42	24.07	99.74		1.13		
Tie No. 109.	do.	do.	16	8.29	7.08	12.45	16.68	40.84	22.52	99.57		.74		
Pile No. 118.	Great Western Ry., Heath Division, Eng- land.	Yellow pine.	47	7.68	19.92	17.58	20.62	14.48	27.11	99.71	32.15	.78		
Tie No. 107.	do.	Baltic redwood.	42	12.71	9.45	12.30	27.56	33.48	17.87	100.66	51.07	.96		
Tie No. 105.	do.	do.	63	5.08	6.83	10.16	26.11	32.17	23.91	99.18				
Tie No. 103.	London and Northwestern Ry. Co., Eng- land.	do.	19	14.07	17.78	11.88	21.26	14.64	34.01	99.57	35.14	.26		
Tie No. 110.	do.	do.	19	13.84	18.23	16.61	23.01	12.78	29.78	99.78	26.87	.68		
Paving blocks Nos. 88 and 89.	Northeastern Ry. Co., England.	Yellow pine.	20	17.19	20.13	10.27	12.18	27.46	29.78	99.82	57.03	1.19		
Tie No. 114.	do.	Pine.	30	7.41	15.44	7.44	15.68	44.96	16.14	99.66	21.46	.37		
Paving blocks Nos. 90 and 91.	City Engineer, Hull Corporation, Hull, England.	Yellow pine.	11	14.37	21.03	24.45	7.68	25.06	21.78	100.00	24.93	.87		
Tie No. 108.	Maryport and Carlisle Ry. Co., England.	do.	23	5.17	10.59	12.61	28.56	20.32	27.87	99.95		.62		
Tie No. 2.	Highland Ry. Co.	Scotch fir.	20	5.93	15.78	18.04	27.80	18.12	29.81	99.55	48.14	.76		
Tie No. 3.	do.	do.	20	9.03	10.15	16.32	20.54	12.63	40.02	99.66	52.13	.54		
Tie No. 41.	do.	do.	22	12.76	10.46	20.34	22.63	16.32	29.83	99.58		1.14		
Tie No. 101.	North British Ry. Co., Scotland.	do.	24	11.46	8.32	26.36	23.42	29.58	11.86	99.54	40.15	.38		
Tie No. 102.	do.	do.	21	8.19	18.24	12.16	28.92	22.76	17.35	99.43		.21		
Tie No. 112.	do.	do.	14	7.21	7.65	8.03	17.58	38.88	27.97	100.58	53.04	1.23		
Pile No. 116.	Clyde Navigation Trust, Glasgow.	Red pine.	46	8.42	9.44	16.92	29.68	32.08	11.03	99.15				
Pile No. 111.	do.	do.	46	8.07	19.53	14.61	18.15	17.23	27.03	99.31				
Pile No. 117.	do.	do.	46	9.31	22.20	20.10	24.30	16.24	16.84	99.68	33.14			
Pile No. 4.	do.	do.	46	12.61	16.87	12.15	13.25	25.37	32.30	99.94	54.42	1.07		

Pile No. 5.	do.	Pitch pine.	21	9.06	13.56	10.52	20.34	31.24	23.92	99.58	.....	41.16	1.78
Tie No. 8.	do.	do.	22	12.36	9.03	15.21	20.46	13.35	32.91	99.96	.....	51.16	1.37
Tie No. 9.	do.	Baltic redwood.	16	9.42	6.39	10.38	27.75	31.86	23.51	99.89	.....	52.14	1.15
Pile No. 81.	do.	Loblolly pine.	11	18.34	38.88	13.76	13.12	10.68	24.02	99.86	.....	34.47	37.24
Pile No. 82.	do.	do.	15	19.12	51.50	12.35	3.74	11.61	21.03	100.23	.....	48.62	34.15
Pile No. 83.	do.	do.	7	Treated with creosote and resin. Not analyzed.									
Pile No. 84.	do.	do.	20	8.43	13.56	15.78	14.49	19.77	36.13	99.83	.....	55.22	.....
Pile No. 85.	do.	do.	17	13.21	19.07	12.39	12.32	17.58	38.14	99.50	.....	18.96	43.71
Tie No. 86.	do.	do.	22	619.36	22.53	13.47	22.63	18.58	22.37	99.58	.....	22.53	46.18
Pile No. 50.	do.	{ E. B. Cushing, Southern Pacific Co., Houston, Tex. International Creosoting and Construction Co., Galveston, Tex.	29	616.14	1.26	27.60	22.43	31.22	12.02	5.13	99.66	25.41	48.15	
Pile No. 51.	do.	do.	29	17.63	2.18	31.06	18.21	36.04	4.13	99.79	28.14	41.12	.....
Paving block No. 52.	do.	do.	34	18.81	48	26.61	32.06	17.52	8.47	14.42	99.56	50.67	.....
Paving block No. 53.	do.	do.	39	12.44	68	17.57	18.78	37.52	16.62	8.56	99.73	3.68	53.89	
Paving blocks Nos. 54 and 55.	do.	do.	9	46.07	9.62	14.41	19.27	41.74	11.23	3.40	99.67	.....	.....
Conduit pipe No. 67.	do.	do.	14	65.46	5.08	27.23	10.46	27.68	19.03	9.93	99.41	23.17	14.28	

aTwenty years as a tie and thirteen years as a fence post.

bCenter.

cUnder rail.

dPaving block No. 54.

ePaving block No. 55.

GLASGOW AND SOUTHWESTERN RAILWAY, SCOTLAND:

Tie No. 106 taken out of the Main Line February 12, 1905, near Milliken Park; put in during 1889. Creosoted with $2\frac{1}{2}$ gallons of gas-works creosote of 1.010 specific gravity at 60° F.

Tie No. 104 taken out of the Main Line February 6, 1905, near Elderslie Station; put in during 1887. Creosoted with about 24 gallons of oil to the tie.

Tie No. 113 taken from the Main Line April 16, 1905, near Elderslie Station; put in during 1887. Creosoted that same year with about 24 gallons of oil to the tie.

Tie No. 109, same history as No. 106.

GREAT WESTERN RAILWAY, HEATH DIVISION, ENGLAND:

Pile No. 118 was in salt water at New Milford 47 years; not decayed, but attacked by Limnoria.

Tie No. 107 was in sidings at Eastern Depot, Swansea, for 42 years.

Tie No. 105 served for 20 years in the Main Line at Hirwain (Vale of Neath), and afterwards was used as a fence post for 13 years.

Menel pile No. 1 was in a tidal river at Loughor for 53 years. Treated with crude coal tar and not analyzed.

Menel pile No. 2 was in salt water at Llanelly Docks for 58 years. Treated with crude coal tar and not analyzed.

LONDON AND NORTHWESTERN RAILWAY COMPANY, ENGLAND:

Ties No. 103 and No. 110 installed in the road for permanent way purposes in 1886; removed February 11, 1905. They were creosoted with blast furnace Scotch oil in 1886.

NORTHEASTERN RAILWAY COMPANY, ENGLAND:

Paving blocks Nos. 88 and 89 removed in perfect condition after being in use at Hull for 204 years.

Tie No. 114 was under water for 20 years, and afterwards used as a tie under piles of timber in the dockyard for 40 years, a total service of 30 years.

CITY ENGINEER, HULL CORPORATION, HULL, ENGLAND:

Paving blocks Nos. 90 and 91 laid with close joints in 1894; removed in February, 1905, in perfect condition. Paving block No. 92 consisted of three broken blocks laid with open joints in 1892; not decayed when removed in 1905. Treated with creosote and pitch on the outside; not analyzed.

MARYPORT AND CARLISLE RAILWAY COMPANY, ENGLAND:

Ties Nos. 108 and 137 creosoted in 1881, placed in track 1882, and removed in 1905. Tie No. 137 was not analyzed.

HIGHLAND RAILWAY COMPANY, SCOTLAND:

Ties Nos. 2, 3, and 41 were in service in a gravel ballast, damp bed, for 20 years, 20 years, and 22 years respectively. These ties were seasoned two years before treatment and stacked six months after creosoting before being placed in the track.

NORTH BRITISH RAILWAY COMPANY, SCOTLAND:

Tie No. 101 was in the track 21 years; No. 102, 21 years; No. 112, 14 years; No. 100, 14 years (not analyzed). These ties were taken out at different parts of the system.

Clyde Navigation Trust, Glasgow:

Pile No. 116 is from the part of the pile which was above high-water level, and was therefore exposed to the air.

Pile No. 111 is from the part of the pile between high and low water. It was therefore exposed to the wash of the water.

Pile No. 117 is from the part of the pile which was always under water.

Pile No. 4 is from the part which was buried in the ground.

Pile No. 5 is from the part of a pile above high water; creosoted with 8 pounds per cubic foot.

Tie No. 8 was laid in slag in the year 1883.

CLYDE NAVIGATION TRUST, GLASGOW—Continued.

Pile No. 9 is a part of a Baltic redwood tie laid in 1889. It was bedded in concrete and causewayed over with granite sets. Both of these ties were creosoted with $2\frac{1}{2}$ gallons of gas creosote of not less than 1.010 specific gravity at 60° F.

Pile No. 115 is from the part of Pile No. 5 between high and low water; not analyzed; creosoted with 8 pounds per cubic foot.

NORFOLK CREOSOTING COMPANY, NORFOLK, VA.:

Pile No. 81, section of a creosoted pile put in Santiago Harbor, Cuba, April, 1887; taken out in perfect condition November, 1902.

Pile No. 82, section of a creosoted pile put in Tampico Bay in May, 1891; taken out in perfect condition October, 1902.

Pile No. 83, section of a pile treated with creosote and resin; removed after seven years badly attacked by Teredo.

Approved April 1, 1907.

JAMES WILSON,

Secretary.

NORFOLK CREOSOTING COMPANY, NORFOLK, VA.—Continued.

Pile No. 84, section of a creosoted pile put in a drydock at Newport News, Va., May, 1881; removed in good condition October, 1901.

Pile No. 85, section of a creosoted pile in service for 17 years at Newport News, Va. Tie No. 80 was in the track for 22 years at Houston, Tex.

INTERNATIONAL CREOSOTING AND CONSTRUCTION COMPANY, GALVESTON, TEX.

Piles Nos. 50 and 51 were in Galveston Bay for 29 years.

Paving block No. 52 was in service in the street at New Orleans, La., for 34 years.

Paving block No. 53 was in service in Galveston for 29 years.

Paving blocks Nos. 54 and 55 were in use at Galveston for 9 years. They showed poor service.

BELL TELEPHONE COMPANY:

Conduit pipe No. 67 was in service as conduit at Philadelphia, Pa., for 14 years: removed in perfect condition to make extensions of service.

Wood Distillation

BY W. C. GEER, EXPERT.

[NOTE.—The Forest Service has received many inquiries about the commercial distillation of hardwoods and softwoods and the quantity of the products obtained. It has been impossible to answer these inquiries by letter as fully as desired, and the growing need of a popular publication which would briefly state a few facts on wood distillation has been strongly felt. For this reason this circular has been compiled. It is not intended to be technical in nature or to contain the results of original investigations, but rather to furnish a few facts concerning the wood distillation industry as it now stands in this country. Circulars of a more technical character and dealing with concrete problems in wood distillation will follow.]

INTRODUCTION.

There are two distinct processes for obtaining valuable products from wood by distillation—destructive distillation and steam distillation. In the destructive process the wood fiber is broken down and new compounds are formed, but in the steam process this is not properly the case. In both processes volatile compounds of the wood are vaporized.

In destructive distillation heat is applied below the wood-containing vessel, which has a comparatively small pipe as its only outlet. The heat vaporizes the volatile compounds, such as water and turpentine, and breaks down the nonvolatile compounds, such as cellulose and the wood gums; it forms a number of new compounds, usually of a simpler chemical nature, and these in turn are vaporized with the water and turpentine, leaving a residue of charcoal. The decomposition of the wood in this process is exceedingly complicated and is not yet fully understood.

In steam distillation, which is much simpler, the wood is chipped and placed in a closed receptacle into which steam is blown from a boiler, and the volatile compounds which are not chemically united with the rest are vaporized and carried out of the retort with the steam. Though in practice the wood is often so much overheated that the wood fiber is slightly decomposed, and though it is quite possible to carry the overheating so far that the process becomes one of destructive distillation, it is nevertheless true that “steam distillation,” as the term is technically used, signifies the

separation of volatile products from wood with, at most, but little decomposition of the wood fiber.

With both these processes the vaporized compounds after leaving the retort pass through water-cooled tubes, where they are condensed into the crude liquors which after refining yield marketable products.

Different woods give different marketable products after distillation. Thus, the hardwoods—beech, birch, and maple—yield acetate of lime, wood alcohol, and charcoal, and longleaf pine yields turpentine, tar, pine oils and charcoal. This difference in the products is due to the fact that pine woods are resinous, while hardwoods are nonresinous. From the point of view of products, therefore, it is necessary to distinguish between the kinds of wood used, as well as between the distillation processes.

DESTRUCTIVE DISTILLATION OF HARDWOOD.

Hardwood distillation has been an established industry in the United States for a number of years. The products already mentioned are wood alcohol, charcoal and acetate of lime, each of which has important uses. The plants are located in the northern part of the United States, where, except for the Appalachian hardwood belt, the hardwoods are most common.

The woods used are largely beech, birch, and maple, with the last preferred. The wood is cut into cordwood lengths and allowed to season for a year. According to the best information, the amount of the products obtained from green wood and from ordinary dry wood is not different, cord for cord, but the higher water content of green wood dilutes the distillate and necessitates more fuel for the carbonization. Excessive seasoning will doubtless reduce the yield of valuable constituents. Body wood is better than slab wood. Very small wood, such as thin edgings, carbonizes so rapidly that it must be mixed with larger pieces. The problem of the destructive distillation of sawdust has not yet been satisfactorily solved.

APPARATUS.

Wood is heated or carbonized in three forms of apparatus: (*a*) In brick kilns, (*b*) in retorts, (*c*) in ovens.

The charring of wood is a process as old as civilization. In the early days the wood was charred under sod in the old charcoal kiln, which has been a familiar sight over a good part of the world. The modern charcoal kiln is so made that valuable vapors are condensed from the smoke, which in the old-fashioned kiln escaped

into the air and were wasted. Kilns are now mainly used to produce charcoal for blast furnaces for pig iron. They are made of brick, with a circular base, and divided approximately into two semi-circular sections. They hold each about 50 cords, and are charged and discharged by hand. The vapors are carried off into condensers, where the condensable ones are liquefied.

The name "retort" is given to a small form of cylindrical vessel holding about three-fourths of a cord. The retorts are set horizontally in brickwork, in pairs, each pair forming a "battery," and heated from beneath. They are filled and discharged from a single door in front, which can be tightly fastened. The top of the battery is often tiled and serves as a drying floor for acetate of lime. The condensers are of copper, and are cooled by water. A "run," from charging to recharging, takes twenty-four hours.

The invention of the "oven" form of carbonizing vessel marked a distinct forward step in wood distillation. Oven kilns are made large enough to hold from two to four cars, which are run in on tracks, each loaded with about 2 cords of wood. They are usually fired separately, and the vapors pass over into the condensers either at the side or at the end. In other respects they resemble the "retorts."

PRODUCTS.

Four crude products are obtained from each of these forms of carbonizing vessels: (1) Charcoal, which remains in the vessel; (2) a noncondensable gas, which is carried off by suitable pipes; (3) an aqueous liquor known as "pyroligneous acid;" and (4) wood tar, which is condensed with the pyroligneous acid.

The charcoal is cooled differently in the case of each distilling vessel, though in all cases it is cooled for forty-eight hours. With kilns, it is allowed to cool before being removed; with the retorts, it is shoveled into drums or cans and sealed from the air; and with the ovens, the loaded cars are run out and closed in large coolers, which are similar in form to the ovens.

The gas from the kilns is piped back into the kiln furnaces, where it serves to carbonize the wood. The gas from retorts and ovens is burned under the boilers or under the retorts.

The pyroligneous acid and the tar run off together from the condensers into vats, where the tar settles. The pyroligneous acid is reddish brown in color and has a strong, characteristic, burnt-wood odor. The tar, when in thin layers, is dark brown in color, and has a bad odor. These two liquid products are refined by processes

which in general are the same for each of the three forms of carbonizing apparatus. The processes differ somewhat, however, at the different plants.

Dissolved in the tar are some of the valuable compounds of the pyroligneous acid, while dissolved in the pyroligneous acid are some tarry bodies. Both liquids are distilled in order to concentrate the valuable substances, which are chiefly acetic acid and methyl, or wood, alcohol. The concentrated liquid containing the acetic acid and methyl alcohol is neutralized with lime and distilled from a "limelee" still, giving (1) a residue which upon evaporation yields gray acetate of lime, and (2) a distillate which upon refining yields the various grades of wood alcohol.

Some plants obtain a crude, brown, evil-smelling wood alcohol, of 82 per cent. strength, which is sent to a refinery for further treatment; others obtain a 95 to 99 per cent. product without color or unpleasant odor. Wood alcohol is ill-smelling only when impure as a result of incomplete refining.

Oven and retort plants which produce alcohol no purer than 82 per cent. secure about the following average yields from wood distillation per cord of wood:

Charcoal	45 to 52 bushels
Gray acetate of lime	180 to 225 pounds
Wood alcohol, 82 per cent.....	8 to 10 gallons

The lack of chemical supervision at the works makes statements of yield a little confusing, since wood alcohol and acetate of lime are variable in quality and the number of gallons and pounds may therefore actually represent products of quite different composition.

Kiln plants obtain about the following yield per cord of wood:

Charcoal	45 to 52 bushels
Acetate of lime	90 to 150 pounds
Wood alcohol, 82 per cent.....	4 to 6 gallons

USE OF PRODUCTS.

These compounds have a variety of uses, which may be briefly mentioned. Charcoal is used in blast furnaces, for the production of pig iron, in copper and sugar refineries, in the production of gunpowder, for fuel, etc. Wood alcohol is sold under a variety of trade names, such as "columbian spirit" and "colonial spirit." It is most widely used as a solvent in the production of shellacs and varnishes. It is also used in hat making, in perfumery, in the coal-tar dye industry, in manufacture of formaldehyde, and for mixing

with grain alcohol to produce "denatured" or "industrial" alcohol. The acetate of lime is a gray, finely crystalline body, which is used in the manufacture of wood vinegar, acetic acid, many commercial acetates, acetic ether, acetone, and other products. (From the acetone may be produced iodoform and chloroform.)

A number of receipts for the preparation of denatured alcohol have been recently authorized by Congress and established by the Commissioner of Internal Revenue, so that denatured alcohol, with its due admixture of wood alcohol, is now a market article. The wood distillation plants now in existence in the United States are able to produce probably 30,000,000 gallons of wood alcohol annually.

Denatured alcohol is now a competitor of wood alcohol. At present the producers and refiners of wood alcohol are in suspense as regards the extent of the consumption of the product for denaturing purposes.

STEAM DISTILLATION OF HARDWOOD.

Several species of hardwood are distilled by steam in order to obtain valuable essential oils. Sweet birch, for example, yields "oil of wintergreen," an oil used in medicinal preparations. No thorough study has yet been made of this division of the subject, but it is known that a small industry is supported.

DESTRUCTIVE DISTILLATION OF YELLOW PINE.

The destructive distillation of yellow pine is carried on in the Southern States, where the distillation plants are so widely scattered that a statement of the location by States would mean but little.

The wood generally used is that of longleaf pine, from which turpentine and rosin are mainly obtained. At some plants, however, longleaf pine, shortleaf pine, Cuban pine, and others are indiscriminately used, but for the best results longleaf and Cuban pines are selected. The most valuable material is wood rich in resinous contents, or "fat," in which lightwood and stumps rank first, wood immediately under the "box faces" next, and slabs and other mill refuse last. Pine sawdust is not used for destructive distillation.

APPARATUS.

Iron or steel retorts are used, varying in capacity from 1 to 4 cords. They are either vertical or horizontal. The vertical retorts have their long axis upright, and are set singly in brickwork with suitable flues, usually with the openings for charging and discharg-

ing at the top and bottom. The firebox below is at one side, so that the heat goes around the outside of the retort itself. Few of these retorts are now in use.

The horizontal retorts are similar to those used in hardwood distillation. Though they differ as to form, all are cylindrical steel vessels set in batteries in brickwork and are charged and discharged through doors at one or both ends. The gases escape through pipes to copper condensers. The firebox is sometimes constructed to fire two retorts at a time, though usually but one.

PRODUCTS.

Though there are a number of methods which differ somewhat in results, the five products usually obtained are: (1) Charcoal; (2) a noncondensable gas; (3) light oils, which are often taken in two fractions, one of which is a crude turpentine; (4) tar, and (5) pyroligneous acid. At some plants the light oil vapor, which volatilizes easily, is led off into condensers with the gas and pyroligneous acid, while the tar, which is heavier, is drawn off at the bottom; at others, the entire volatile product is driven off through a pipe at the top and, after passing through the condenser, is separated into the crude turpentine and tar fractions.

There is no more uniformity in heating methods than in the form of the retorts. The run is thirty-six or forty-eight hours, or longer. Charcoal which is to be sold is cooled in the retort, and that which is to be used for fuel is drawn hot and sprayed with water to prevent fire. The gas is allowed to run to waste or is burned under the retorts and boilers.

The pyroligneous acid from hardwoods contains the most valuable products, but that from pine, which has a strong odor and a reddish-brown color, is of such different composition that very little is done with it. The yield from a cord of pine wood is, according to the most widely accepted figures, not more than 3 gallons of 82 per cent. wood alcohol and about 70 pounds of brown acetate of lime. The extraction of wood alcohol from pine wood is not at present on a commercial basis, and at the majority of plants the pyroligneous acid runs to waste.

The crude turpentine is a dark red oil with the bad odor associated with products of destructive distillation. After proper fractional distillation, it yields for market a nearly colorless turpentine, which has a distinctive odor.

The tar is sometimes refined far enough to produce a good quality of retort tar and to yield oils which, with the heavy distillates

from the crude turpentine, make disinfectants, wood creosote, and a number of market articles.

The refining processes, which are largely secret, are not the same at all plants, while the products sold are far from uniform.

Since few plants operate under the same conditions, and since a number of products may be obtained from the tar and crude turpentine, it is difficult to estimate the amount of products obtained from yellow pine. Moreover, the wood itself varies widely in resinous content. Heavy, rich "lightwood" contains the largest quantities of turpentine and other oils, whereas other kinds of "lightwood" may yield but little. Sapwood yields the least. The following table shows as nearly as practicable the ordinary yields per cord of wood obtained in practice by the destructive process:

Refined turpentine	7 to 12 gallons
Total oils, including tar	50 to 75 gallons
Tar	40 to 60 gallons
Charcoal	25 to 35 bushels

USES OF PRODUCTS.

The turpentine is used as a second grade, inferior to gum turpentine. There are no recognized grades of destructively distilled turpentine, and the composition of the turpentine from different plants is not uniform. Formerly it was poorly refined; it is now made practically colorless. In the refining, certain heavy oils are obtained, which, when combined with similar heavy oils from the tar, are made into "pine oils," used as disinfectants, paint dryers, wood preservatives, etc. One of the uses for the tar is cable coating. The uses of the acetate of lime, in this case "brown acetate," have already been mentioned. The charcoal is burned at the plant or sold for fuel. The pyroligneous acid in its crude form is occasionally sold, although most of it goes to waste.

Several causes have led to many failures among plants of this kind. One of these was bad management. Men engaged in the business, without training or a knowledge of the market, expected an immediate demand for the products. Another cause was the use of inferior retorts, which in many cases were made of thin steel and so were quickly burned out. A third was lack of perseverance when difficulties arose.

STEAM DISTILLATION OF YELLOW PINE.

The plants which distill wood by the seam method are located in the yellow pine belt. In general, the wood is the same as that used for the destructive distillation of yellow pine, but is separated into

classes. Steam plants use the richest wood that can be secured, since turpentine is the only valuable product, although the wood after extraction is used for fuel. The wood is divided into three classes: (1) The rich "lightwood," of which several grades are used; (2) stumps, which are also rich in turpentine; and (3) saw-mill waste, which includes sawdust, butt cuts, and slabs. All wood must be "hogged" into chips before it is placed in the retorts.

APPARATUS.

Both vertical and horizontal retorts are successfully used. But the wood is treated by two different methods, one using superheated steam under low pressure and the other saturated steam under higher pressure.

With superheated steam a vertical retort is used, and the steam, before entering the retort, passes through a superheater, which raises its temperature high enough to readily volatilize the turpentine. From the condensers the distillates run into a separator.

For saturated steam several sorts of retorts are used, and the steam enters them directly from the boiler. There are a number of patented devices, the most important differences in which have to do with methods of charging and discharging. The fundamental idea, however, is to maintain a sufficient pressure of steam, throughout the run, to facilitate rapid extractions. A separator is used, as with superheated steam.

PRODUCTS.

The products of both processes are crude turpentine and water, in a separator tank, and chips left in the retort. The turpentine, which is lighter than water, floats on the surface and is easily drawn off, ready for refining. The chips, after drying a short time in the air, are suitable for fuel.

In order to obtain a market grade of turpentine, the crude product should be refined by distillation with steam in a copper still. As it comes from the retort its color is slightly yellow.

There is the same variety in methods used as in other kinds of wood distillation, and consequently the same lack of uniformity in the products. Much remains to be learned as to the best method of refining turpentine so as regularly to secure the best grades.

The amount of turpentine obtained from steam distillation varies widely. The wood itself varies greatly in richness. A conservative average per cord is given in the following table (the difference between stumps and "lightwood" is slight enough to be disregarded):

Lightwood:

Refined turpentine	10 to 15 gallons
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Heavy oils	1 to 3 gallons
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Sawdust:

Refined turpentine	2 to 4 gallons
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Heavy oils	$\frac{1}{2}$ gallon
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The refined turpentine is of reasonably uniform quality, is nearly colorless, has an agreeable odor, and has a fair market at a price somewhat below the market price for gum spirits of turpentine.

COMPARISON OF METHODS.

Comparing the steam methods with the destructive methods, although there is room for difference of opinion, it would seem that the steam distillation is open to the wider development. The successful destructive distillation plants are those which are run by men who have remained in the business long enough to establish their processes and methods and the markets for their products. Turpentine, the leading product, is probably produced less expensively by the steam method, and the steam apparatus necessary to handle a given quantity of wood per day, say 50 cords, is easier to operate.

There have been fewer failures in steam distillation than in destructive distillation, perhaps because it is of more recent development, and because those promoting the enterprises have been able to profit by the mistakes of their predecessors. Yet many operators have failed, mainly because they had not familiarized themselves with the fundamental principles controlling the successful construction and operation of a plant.

The figures on pages 6 and 7 are not intended to compare yields by destructive and steam distillation from the same grade of wood, but simply the yields obtained by the two methods under actual conditions, where, in point of fact, very different grades of wood are used.

There is but scanty published information on the properties of the turpentines produced by these two processes in America, or on their actual value in the paint and varnish business. Up to the present these turpentines are merely competitors of "gum spirits."

Approved: JAMES WILSON, secretary of Agriculture.

Washington, D. C., August 19, 1907.

Miscellaneous News Clippings

Growing Forest Timber

FROM FARMERS' GUIDE.

In this article I shall try to prove to Guide readers that the time has arrived when we should plant timber; that the most profitable tree to plant, all things considered, is the upright growing catalpa speciosa; that it can be grown at the rate of five tons per acre per year; that it is worth more per ton for posts than the average farmer gets for his timothy hay delivered at the railway; that the trees can be set as easily as tomatoes and cultivated as easily as corn for the first two or three years, after which no further cultivation is required.

Twenty-five years ago I sent to E. E. Barney, of Ohio, for his booklet on catalpa culture. At considerable cost of time and money he had gathered the facts contained regarding this valuable tree. He urged its planting by railroads, farmers and others in preference to anything else. So anxious was he for the future timber supply that he sent his booklet gratuitously, postage paid, to all who asked for it.

At the St. Louis exposition there was a catalpa exhibit. In it was a post that had been in constant use, and in a good state of preservation eighty-five years and a railroad tie thirty-two years. Also beautiful furniture and a section of a magnificent passenger coach, the inside finish of which was equal to Honduras mahogany.

Those of my readers who have had occasion to build anything recently or to buy fence posts or telephone poles need not be told how almost prohibitory are present prices. A lumber dealer in Crawfordsville prices cedar posts from Tennessee, five inches in diameter at the butt, at forty cents each and end posts nine inches in diameter at \$3. I recently saw at Greencastle a car load of forty interurban poles from Idaho the freight on which was \$400, or \$10 each.

Twenty-five years ago we thought we had timber enough for centuries, so not many acted on Mr. Barney's advice, but the few who did are now reaping a golden harvest.

In my travels over the State in farmers' institute work I have met with and talked to the owners of some of these groves and with a tape line I have carefully measured hundreds of trees, and I find that on good land not too closely set and properly cared for, they

will add an inch in diameter for every year of their growth up to, say, twenty years. The illustration herewith is a reproduction from a photograph of a view in one of these groves. This grove was set in 1883, the trees only $5\frac{1}{2}$ by 6 feet apart. It consists of 1.68 acres and is on rather poor land. It was cultivated two years, pruned for a few years and partially thinned when large enough for posts. The number of trees originally set was 2,700 (twice too many) and there are now standing 1,500, 1,200 of which are large enough for posts. The owner, I was told, refused \$800 for them three years ago. I measured the trees in the five north rows of this grove one foot above the ground and they averaged as follows, after deducting one inch for bark. The first or outside row of thirty-five trees averaged 12.6 inches in diameter; the second row 8.7 inches; the third row 8 inches; fourth row 8.1 and the fifth row 8.25 inches, and they were fifty feet high and many of them straight as gunbarrels and would make five post cuts to the tree. Some of the trees in the outside row measured nineteen inches in diameter and one measured twenty.

Now while this is one of the best groves in the state, yet the trees were too closely set and too tardily thinned. This is proven by the much larger size of the outside rows. As near as I could estimate the largest trees would make twenty-five posts each, and were they as straight and tall as the inside trees, would make such interurban poles as I saw at Greencastle, the freight on which was \$10 apiece.

There are a number of catalpa groves of known age in Ohio, under the watchful eye of the officials of the state experiment station. According to their observation the trees should not be set closer than 5 by 8 feet apart, and thinned as soon as large enough for posts, which on good land will be in from seven to eight years. The first thinning should take out every other row both ways. Set 5 by 8 feet there are 1,080 trees per acre. Taking out every other row each way (810 trees) leaves 270 trees, standing 16 by 10 feet apart. In five years more another 100 should come out, leaving 170 trees to grow to the end of 20 years, when they should average 20 inches in diameter. Now let us figure a little and see if we can find about what our acre will be worth at present prices of posts, remembering that for fine finishing work or veneer they would be worth much more.

Instead of 30 or 40 cents each, the retail prices of posts in Indiana now, we will call the price 20 cents. At the first thinning we took out 810 trees; at one post each they are worth \$162. The second thinning will make 1,600 posts, worth \$320. The final cutting of the 170 trees figures something like this: Each tree will

make seven post cuts, ranging in number from 16 in the butt cut to one in the top cut. It will make 29 first-class, four second-class and one good end post, making the tree worth \$9.40. Multiply this by 170, the number of trees, and we have \$1,598. To this add \$482, the value of the other cuttings, and we have a—well, cut it in two in the middle and it will beat timothy hay. At the freight charge on the Greencastle poles, it makes the 170 trees alone worth \$1,700 an acre. This equals an annual growth of \$85 an acre.

To show that twenty inches is not too radical a claim to make for catalpa growth note the illustration of cross section of tree. As one can readily see by the annual growths, shown by the rings, the trees from which I cut this section was 19 years old and 24 inches in diameter. It also shows that for every four years of its growth it added about five inches to its diameter. During the four years from the 12th to the 16th it added five and one-fourth inches.

Railway authorities estimate that they will need five billion ties in the next ten years, and that to supply them and the telegraph poles and the fence posts for their right of way for the same period will require the timber from five million acres of heavy forest.

Locust is a splendid tree, but it has three objections not possessed by the catalpa; it sprouts too freely from the roots, the catalpa sprouts from the stump only; it is so hard when seasoned and splits so easily that it will not hold a spike as a railroad tie, and last, though not least, whole plantations are sometimes killed by the borers.

There is one unfortunate thing connected with the catalpa, and that is the difficulty of getting the true speciosa. The seeds of the low branching catalpa bignonioides which we see along the streets in our towns are very like the others and many nurserymen have in the past and are now sending out such trees for the true speciosa.

As forest products are steadily advancing in price it would seem that every farmer ought at least to grow his own posts. Suppose you plant ten acres and cultivate the balance of your farm a little better. Your bushels and tons would not be much reduced, and see what you will have in timber twenty years from now.

With no cultivation after the third year the trees just grow, no worrying about wet or dry or hot or cold weather and no labor problem, as your harvest is in the winter when labor is cheap and easy to find.

Nor is this all: In the grove above described is a rich blue grass carpet of living green, and has been for years.

Putnam County, Ind.

L. A. STOCKWELL.

Indiana and Its Industries

INDIANAPOLIS STAR, OCTOBER 28, 1907.

In no other industry has Indiana's showing declined as rapidly as in that of the hardwood lumber industry. It has been the rule that other Indiana industries have advanced, but the lumber industry has proven an exception to the rule. Figures compiled on Indiana's hardwood lumber supply and the production by the lumber industry show that the maximum production has been reached. Softer lumber materials have not declined as rapidly as the hardwood lumber, but their day is coming. Enormous quantities of lumber are required each year in Indiana as well as in other States for railroad ties, telephone and telegraph poles, piles, fenceposts and fuel, as well as wood for lumber making. A great amount is wasted in lumbering and manufacture. Because of the rapid clearing of the forests in this State it is necessary at this time to bring most of the railroad ties and telegraph poles into the State. The amount of standing hardwoods is uncertain, as no census has ever been taken of the standing timber and there have been but very few estimates of Indiana's supply. The largest estimate sets the figure at eight billion feet. It is estimated that Indiana's lumber supply is being exhausted at the rate of 30,000,000 feet per year. This would mean that Indiana's supply will last about twenty-four years more.

Conditions during the past year, according to lumber dealers, suggest no reason for increasing this estimate. A distinct difference exists between the softwood and the hardwood situation, there being soft woods in many parts of the State still accessible. However, when the supply is gone there will be no other source upon which to turn. Only within the last eight years have prices begun to reflect the dwindling supply, though the immoderate cutting away of this resource has been going on for decades.

Considering the impoverished supply and the tremendous demands on the part of all industries for timber, lumber men say that there is nothing surprising about the increase in prices on hardwood lumber, which seem to have failed to keep pace with the increased prices on soft lumber. This is considered rather re-

markable, in view of the shorter supply, but is probably due, lumber men say, to the fact that soft woods forming the main bulk of the lumber supply have led in establishing prices. The high price on both soft and hard woods is taken to indicate, lumber men say, that the industry has reached rock bottom and requires every sound piece of hardwood lumber that can be put upon the market.

Several great industries in Indiana use hardwood timber mainly or almost exclusively for their raw material. Notable in this list are hardwood lumber manufacturing plants, the cooperage, furniture and vehicle industries and the industries engaged in the manufacture of musical instruments, coffins and small wooden ware. All of these industries would suffer greatly and some would fail entirely upon the exhaustion of the hardwood supply. Other industries, such as the manufacture of agriculture implements, freight and passenger cars and boxes and crates, use immense quantities of hardwoods.

Hardwood lumber manufacture affords an example of the damage that has already been done. It has been shown how hardwood lumber production in Ohio was cut down over one-half between 1899 and 1906. In Indiana during the same period the lumber industry fell from the third to the eighth place; the value of products increased 27.1 per cent.; the number of wage earners decreased 42.6 per cent. and the wages paid decreased 36.6 per cent. Indiana lumber manufacturers were among the first to feel the blight of the exhausted timber supply. When the local supply ceases this industry must stop. Most industries which now use hardwoods can go on, however, by bringing their supplies from a distance. It is only with the failure of the entire supply that they are damaged.

In much the same way the cooperage industry must be near the forests. Slack cooperage employs a great number of hardwoods. Tight cooperage makes use of the best grades of white oak almost exclusively. The pressure of lack of timber is already heavy on this industry everywhere in Indiana. If the oak supply should fail, the tight cooperage industry will cease largely, for as yet very little progress has been made toward securing substitutes for the oak keg and barrel.

The manufacture of furniture probably demands more hardwood than any other industry and employs it almost exclusively as raw material. According to lumber men it is apparent that the industry uses 20 per cent. of the hardwood production. Failure of the hardwood supply may exterminate the furniture making

industry in Indiana eventually for the reason that the people demand hardwood furniture and will accept but little of any other kind.

As in furniture, hardwood is the chief material used in the manufacture of musical instruments, especially pianos and organs. Maple, poplar, elm, oak, chestnut and basswood are most largely used. Foreign woods are used only for veneers.

No industry stands in a more threatened position, so far as the limited timber supply is concerned, than the vehicle-making industry. The building of wagons and carriages requires the best of hardwoods, now obtained with extreme difficulty. Vehicle manufacturers and forestry men assert that the hickory supply of the entire country can last but ten years longer. Attempts to substitute other woods or other materials for hickory in manufacturing vehicles have failed largely. Metal has, to some extent, taken the place of wood in farm implements, but surprisingly large quantities of hardwood are still used. Steel is being employed more and more in the manufacture of freight and passenger cars. Half of the two million cross ties used annually on the railroads of Indiana are hardwood ties. Although there are many substitutes for the wooden cross tie, they have not been entirely as acceptable to the railroads as the wooden cross tie.

The supply of hardwoods in both Indiana and Ohio is practically exhausted. Indiana's hardwood supply has fallen from 976,000,000 feet produced in 1899, to 446,000,000 feet in 1906. Together with Illinois, Ohio and Indiana produced 25 per cent. of the hardwood in 1899. In 1906 they produced only 14 per cent. These States can never regain their lead or even maintain the standing they have. The land which bore this timber, as fast as it was cleared, has been turned into agricultural use, for which most of the Hoosier soil is well suited. The improved farm lands of Indiana increased 10.4 per cent. between 1890 and 1900. Some waste land will continue to turn out timber, but not enough to have any considerable effect on the State's hardwood supply.

Figures furnished by the United States Department of Agriculture show that the wooded area in Indiana is 6,912,000 acres, of which 2,000 acres belong to the State and 6,910,000 are private unreserved public forests.

Many farmers of the State are planting groves of forest timber, so as to replace the waning supply. Catalpa trees are being planted for ultimate use as fence posts and cross ties. L. A. Stockwell of Putnam County owns a catalpa grove near Greencastle. In

a recent communication he discusses the growing of trees to replenish the forest supply. He says in part:

"Instead of 30 or 40 cents each, the retail prices of fence posts in Indiana now, we will call the price 20 cents. At the first thinning we took out of our grove 810 trees; at one post each they are worth \$162. The second thinning will make 1,600 posts, worth \$320. The final cutting of the 170 trees figures something like this: Each tree will make seven post cuts, ranging in number from sixteen in the butt cut to one in the top cut. It will make twenty-nine first-class, four second-class and one good end post, making the tree worth \$9.40. Multiply this by 170, the number of trees, and we have \$1,598. To this add \$482, the value of the other cuttings, and we have a—well, cut it in two in the middle and it will beat timothy hay. At the freight charge on the Greencastle poles, it makes the 170 trees alone worth \$1,700 an acre. This equals an annual growth of \$85 an acre.

"To show that twenty inches is not too radical a claim to make for catalpa growth note the illustration of cross section of tree. As one can readily see by the annual growths, shown by the rings, the tree from which I cut this section was 19 years old and twenty-four inches in diameter. It also shows that for every four years of its growth it added about five inches to its diameter. During the four years from the twelfth to the sixteenth it added five and one-fourth inches.

"Railway authorities estimate that they will need 5,000,000,000 ties in the next ten years, and that to supply them and the telegraph poles and the fence posts for the right of way for the same period will require the timber from 5,000,000 acres of heavy forest."

Statistics compiled by the State Bureau of Statistics show that the carriage and wagon making industry in 1905 ranked sixth in Indiana, on a basis of products, yet Indiana ranked second that year among the States of the Union in the production of carriages and wagons. South Bend and Indianapolis are the most important centers of production, the combined output of these two cities representing 52 per cent of the entire output of the State. The increase in family and pleasure carriages over 1900 is one of the striking facts in this connection. The increase over 1900 is 26.3 per cent, or a total number of 37,228 carriages. There was a decrease in the number of business wagons manufactured.

The following comparative tables have been arranged by the State statistician from data collected relative to the manufacture of furniture and lumber in Indianapolis from 1900 to the year 1905—the latest figures at hand.

COMPARATIVE TABLE OF FURNITURE MANUFACTURERS—
1900-1905.

	1900.	1905.	Per cent. Rate of increase
Number establishments	22	34	54.5
Capital invested	\$1,366,919	\$1,812,058	32.6
Salaried officials, clerks, etc.....	\$105,810	\$159,799	51
Number salaried officials, clerks, etc.	119	149	25.2
Cost of material	\$806,568	\$1,052,114	30.4
Products, including custom work....	\$1,685,827	\$2,528,238	50
Wage earners	1,182	1,629	37.8
Wages	\$456,644	\$764,399	67.4
Miscellaneous expenses	\$127,250	\$298,704	134.7

COMPARATIVE TABLE OF MANUFACTURE OF LUMBER—
1900-1905.

	1900.	1905.	Per cent. Rate of increase.
Number establishments	23	33	43.4
Capital invested	\$1,021,708	\$1,549,871	51.6
Salaried officers, clerks, etc.....	\$65,769	\$114,556	74.1
Number salaried officials, clerks, etc.	57	112	95.9
Cost of material	\$801,196	\$1,772,649	121.2
Value of products	\$1,588,797	\$2,667,730	64.8
Wage earners	780	879	12.7
Wages	\$326,576	\$452,094	38.4
Miscellaneous expenses	\$162,502	\$118,263	27.1

News clipping from Pennsylvania, showing the trend of the forestry work in that State, and from which comparison with Indiana forestry may be made:

The work of the State Department of Forestry has become so well advanced that revenue from the timber on the forestry reservations will probably be realized within a few years. Deputy Forestry Commissioner Williams is of the opinion that within twenty-five years the net proceeds from the sale of timber and other products of the reservations will prove to be a very substantial sum.

Considerably more than 700,000 acres of forestry reservation are now owned by the State and by the end of the present calendar year the total will be increased to at least 800,000, unless the plans of the Forestry Department entirely miscarry.

A REMARKABLE SHOWING.

This work is the most remarkable because actual purchase of land for reservation purposes was not begun until 1898, although preliminary work began five years prior to that time.

Plans for scientific prosecution of the work on the reservations came to a head in 1903, the year before Dr. J. T. Rothrock retired as commissioner, when the State Forestry Academy was established at Mont Alto. Robert G. Conklin, of Columbia, son of Robert J. Conklin, now commissioner, but at that time deputy, was the first student. The academy course is three years; two classes have been graduated from the academy, giving the State eleven young foresters who are now at work on the reservations.

These foresters carry out on the reserves the ideas in which they have been instructed at the academy.

TO INCREASE THE PLANTING.

Tree planting has been conducted on a somewhat limited scale on the reserves ever since the State began to purchase land, and this work will be materially extended in the future. Many thousands of young trees have been set out, but the annual plantings will be numbered by the million before long. Nurseries at Mont Alto and Greenwood, Huntingdon county, are prolific of young trees and another nursery at Tioga county adds materially to the output. All kinds of trees are bred, white pine being a leader, and the sprouts are set out in the reserves best adapted to receive them.

So far the planting has been pursued with the main idea of protecting the watersheds, but when the work of the department is further advanced the foresters will set out trees with a view of obtaining the best possible commercial results.

Culling inferior timber is a question of only a few years—timber of use mainly for cordwood, or for the cheaper lines of furniture and building. The present generation, however, will in all probability witness the time when a sawmill will be a feature of each reserve and the State will be in business actively marketing timber of all kinds.

The Timber Supply

LOUISVILLE COURIER-JOURNAL, NOVEMBER 6, 1907.

Mr. Gifford Pinchot, the Government forester, says that at the present rate of cutting, the timber supply in the United States, on Government reserves, and private holdings, will be exhausted in twenty years.

Mr. Pinchot is a man whose cool judgment and discretion give him a high rank. For all that his judgment may be too pessimistic. If, however, he is right, the consumption will necessarily diminish, and that speedily, so that the actual exhaustion of supplies will no doubt be postponed to a date beyond that which he fixes.

Nevertheless the situation is very serious. The destruction of our timber is certainly going on at a tremendous rate. Provisions to renew it have been made, but on a scale so small comparatively that they afford no prospect of a continuance of the supply.

The consequences of the exhaustion of our supply of timber are calculated to be of the gravest character. Putting it at not more than twenty years is calculated to make it almost a present situation. If the supply is so restricted and the consumption so great, immediate steps are indispensably requisite to avert the disaster.

There are two methods which appear on the surface to be demanded. The first is to do what can be done to stop the immense consumption of our timber. When the supply is all gone some other means must be found to furnish material for the purposes for which timber is now used. But it is obviously unwise to postpone this until the timber is exhausted. The substitute material should be found now, and the work of applying it should be at once commenced. The greater use of iron and steel instead of timber is one resource, and there has been an immense increase in this respect, but apparently without sparing the timber. Our production of iron has increased phenomenally, but still the timber waste goes on.

The natural resources of this country have been so great that until recently the prospect of their exhaustion was not seriously entertained. We had gone on cheerfully reducing them as if they

were inexhaustible. In recent years the note of warning has been sounded, but it has had little practical effect. The waste goes on, and at an accelerated rate of speed. The population has greatly increased, and the demand on our natural resources has correspondingly been augmented. The greed of gain has dictated the destruction of our forests, without any reference to what is to be done when they are all gone.

Attention is naturally directed to the Dominion of Canada, where there are immense supplies of virgin timber. But our tariff laws continue to offer a premium for the destruction of our own timber. If these were changed there would be less motive for the so rapid destruction of our timber, and in the West there has been a very decided sentiment in favor of a change in the laws. The difficulty in doing this is, of course, pretty well understood, but the creation of an overwhelming public sentiment in its favor is not impossible.

The second point to be noticed is the need of reforesting the numerous areas that have been denuded of timber. This is a slow process, and it cannot be too soon begun in real earnest. For years we have had a good many people who insisted on the need of renewing the forests that had been destroyed. The planting of trees has been recommended, and to some extent accomplished. The point is that the work has not assumed such proportions as to supply the waste in any tolerable degree. A more general, a more concerted effort to renew the supply of timber is not only necessary, but it is requisite that it be entered upon at once.

This is not altogether a work for the Government. Mr. Pinchot says that one-fifth of the forest area is in the Government reserves, but as the privately-owned timber lands are better than those of the Government, the Government does not own one-fifth of the timber supply. The Government may make an effort to preserve its forest areas, but it is known that attempts in this direction are subject to great difficulties. But however these efforts may succeed, it is necessary to bring to bear upon private owners such influence as may lessen the destruction of the timber. How this may be done is a hard question. So long as such destruction is enormously profitable it will continue, quite in disregard of the evil consequences that are threatened. It would seem proper that both the Federal and State Governments should make an effort to diminish the waste. Certainly there ought not to be laws which offer a premium for the destruction of the timber.

The proposed conference at Washington with reference to the ex-

haustion of our national resources ought to do something to awaken public sentiment upon the evils of the destruction of the timber supply. It is given out that the forest reserve will ask Congress for more money and more men to push the work of reforesting the denuded timber lands. This seems to be well advised, in a campaign to overcome the objection of the House machine to its passage. By saving the hardwood supply, and guarding against an annual increase in damage by flood in winter and drought in summer, two birds may be killed with one stone. Moreover an important forest reservation east of the Mississippi would serve to further educate the East as to the advantages of saving natural resources, and it would be less difficult for scheming Western politicians to convince members of committees in Congress that the Government oppresses new States when it curtails the activity of the timber grabbers.

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NINTH ANNUAL REPORT

of the

INDIANA BOARD OF PHARMACY

List of Registered Pharmacists and Registered Assistant
Pharmacists Arranged Alphabetically and
by Counties Alphabetically

Law, Rules and Regulations, Receipts
and Expenditures

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING

1908

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
January 31, 1908. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, February 21, 1908. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

Returned by the Auditor of State, with above certificate, and transmitted to the Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, February 21, 1908.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer February 21, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.

MEMBERS OF THE INDIANA BOARD OF PHARMACY.

	<i>Term Expires.</i>
THEO. E. OTTO, President, Columbus.....	May, 1910
W. H. FOGAS, Mt. Vernon.....	May, 1908
A. F. HEINEMAN, Valparaiso.....	May, 1909
W. H. RÜDDER, Salem.....	May, 1911
A. F. SALA, Secretary, Winchester.....	May, 1908

The regular meetings of the Indiana Board of Pharmacy will be held on the second Mondays of January, April, July and October.

WINCHESTER, IND., Dec. 1, 1907.

*To His Excellency, the Honorable J. FRANK HANLY, Governor of
Indiana, Indianapolis, Indiana:*

DEAR SIR—I have the honor to submit to you herewith the ninth annual report of the Indiana Board of Pharmacy, for the year of 1907, as provided by the law.

Very respectfully yours,

A. F. SALA, Secretary.

THEO. E. OTTO, President.

NINTH ANNUAL REPORT OF THE RECEIPTS AND DISBURSEMENTS OF THE INDIANA BOARD OF PHARMACY.

Balance in hands of Treasurer, Dec. 1, 1906.....	\$1,529 69	
Feb. 2, 1907. Remitted Treasurer	70 50	
May 1, 1907. Remitted Treasurer	264 00	
Aug. 5, 1907. Remitted Treasurer	335 00	
Oct. 26, 1907. Remitted Treasurer	547 00	
Nov. 12, 1907. Remitted Treasurer	7,136 00	
	<hr/>	\$9,882 19

Summary of disbursements, detailed account attached—

Salaries of members.....	\$1,462 33	
Personal expenses of members.....	489 45	
Office expenses	517 64	
Postage and incidental account.....	336 15	
Salaries of assistants during re-registration.....	135 50	
	<hr/>	2,941 07

Balance in hands of Treasurer Dec. 1, 1907..	<hr/>	\$6,941 12
--	-------	------------

The following certificates were issued:

To registered pharmacists by re-registration	3,341	
To registered pharmacists by examination	147	
To registered pharmacists by interchange	2	
	<hr/>	3,490
To registered assistant pharmacists by re-registration	421	
To registered assistant pharmacists by examination	81	
	<hr/>	502
	<hr/>	
Total number registered and re-registered assistant pharmacists as shown on our books Dec. 1, 1907.....		3,992

SALARIES OF MEMBERS OF THE BOARD.

Theo. E. Otto—

1906.

Dec. 11. One month's salary as secretary.....	\$75 00
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1907.

Jan. 11. One month's salary as secretary.....	75 00
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Feb. 11. One month's salary as secretary.....	75 00
---	-------

Mar. 11. One month's salary as secretary.....	75 00
---	-------

1907.

Apr. 11.	One month's salary as secretary.....	\$75 00	
May 6.	23 days' salary as secretary.....	57 50	
May 9.	3 days' salary as member of board.....	15 00	
July 11.	3 days' salary as member of board.....	15 00	
Oct. 18.	4 days' salary as member of board.....	20 00	
			\$482 50

A. F. Sala—

Jan. 10.	3 days' salary as member of board.....	\$15 00	
Apr. 9.	3 days' salary as member of board.....	15 00	
May 6	1 day's salary as member of board.....	5 00	
June 7.	26 days' salary as secretary of board.....	104 83	
July 7.	One month's salary as secretary of board..	125 00	
Aug. 7.	One month's salary as secretary of board..	125 00	
Sept. 7.	One month's salary as secretary of board..	125 00	
Oct. 7.	One month's salary as secretary of board..	125 00	
Nov. 7.	One month's salary as secretary of board..	125 00	
			\$764 83

C. B. Woodworth—

Jan. 10.	3 days' salary as member of board.....	\$15 00	
Apr. 9.	3 days' salary as member of board.....	15 00	
			\$30 00

W. H. Fogas—

May 9.	3 days' salary as member of board.....	\$15 00	
July 9.	5 days' salary as member of board.....	25 00	
Oct. 18.	5 days' salary as member of board.....	25 00	
			\$65 00

W. H. Rudder—

May 9.	3 days' salary as member of board.....	\$15 00	
July 9.	5 days' salary as member of board.....	25 00	
Oct. 8.	5 days' salary as member of board.....	25 00	
			\$65 00

A. F. Heineman—

July 10.	5 days' salary as member of board.....	25 00	
Oct. 16.	1 day's salary as member of board.....	5 00	
Oct. 18.	5 days' salary as member of board.....	25 00	
			\$55 00

Salary list for help during re-registration—

May 25-July 27.	10 weeks, Callie Cline, stenog.....	\$70 00	
June 1-Aug. 3.	10 weeks, Clara Sala, assist stenog.	50 00	
July 23.	6 days, Lora Sarber, stamp clerk.....	1 50	
July 23.	8 days, Alpha Chenoweth, asst. stenog.....	8 00	
July 23.	6 days, Cecil Litschert, mailing clerk.....	6 00	
			\$135 50

PERSONAL EXPENSES OF MEMBERS.

Theo. E. Otto—

1907.

Jan. 9.	Railroad fare to Indianapolis and return..	\$1 15	
	Claypool Hotel	9 00	
Apr. 12.	Railroad fare, Lafayette and return.....	3 50	

1907.

Apr. 12.	Street car fare for board.....	\$1 20
	Checking baggage	20
	Lunch, Indianapolis	25
	Hotel Lahr	8 25
May 6.	Railroad fare, Indianapolis and return....	1 15
	Claypool Hotel	12 00
July 8.	Railroad fare, Indianapolis and return....	1 47
	Claypool Hotel	11 00
	Street car fare.....	25
	Chair car	25
Oct. 15.	Railroad fare, Indianapolis and return....	1 47
	Claypool Hotel	11 00
		<hr/>
		\$62 14

A. F. Sala—

Jan. 8.	Railroad fare, Indianapolis and return....	\$2 65
	Claypool Hotel	8 00
	Lunch	25
Jan. 22.	Railroad fare, Daleville and return.....	1 30
	Drugs purchased	10
Feb. 29.	Railroad fare, Indianapolis and return....	2 65
	Dinner	75
Mar. 26.	Railroad fare, Indianapolis and return....	2 65
Apr. 9.	Railroad fare, Lafayette and return.....	5 30
	Hotel Lahr	8 25
May 7.	Railroad fare, Indianapolis and return....	2 65
	Street car fares.....	50
	Claypool Hotel	12 00
May 29.	Railroad fare, Columbus and return.....	4 54
	Claypool Hotel	2 50
July 8.	Railroad fare, Indianapolis and return....	2 80
	Claypool Hotel	13 00
	Street car fares for board.....	1 00
July 18.	Railroad fare, Indianapolis and return....	3 00
	Lunch	75
Aug. 21.	Railroad fare, Terre Haute and return....	5 88
	Drugs purchased	40
	Street car fares	35
	Hotel Filbeck	2 00
	Meals en route	50
Sept. 18.	Railroad fare, Washington and return....	8 04
	Hotel Meredith	1 50
	Hotel Spencer	1 50
	Meals en route	1 25
Aug. 29.	Railroad fare, New York and return.....	26 25
	Sleeper	4 50
	Hotel Astor	21 50
	Meals en route and city.....	22 50
Oct. 18.	Railroad fare, Indianapolis and return....	3 00

1907.

Oct. 18.	Street car fare for board.....	\$1 25	
	Claypool Hotel	17 25	
			<hr/> \$192 31

C. B. Woodworth—

Jan. 8.	Railroad fare, Indianapolis and return....	\$4 15	
	Parlor car	25	
	Dinner	40	
Jan. 10.	Hotel Claypool	8 00	
	Street car fare	25	
	Supper	50	
Mar. 26.	R. R. fare, Winchester.....	1 70	
	Cab	25	
	R. R. fare, Indianapolis	1 35	
	Dinner	50	
	Supper	40	
	R. R. fare, Fort Wayne	2 40	
Apr. 9.	Cab	25	
	R. R. fare, Indianapolis	2 40	
	Meals, Indianapolis, for board.....	1 90	
	R. R. fare, Lafayette	1 25	
	Hotel Lahr	9 00	
	Street-car fare	25	
	Pullman car	1 00	
	R. R. fare, Fort Wayne	2 16	
			<hr/> \$38 36

W. H. Fogas—

May 9.	R. R. fare, Indianapolis and return	\$7 56	
	Claypool hotel	8 00	
	Meals en route	2 50	
July 8.	R. R. fare, Indianapolis and return	7 56	
	Meals en route	1 50	
	Hotel Claypool	18 00	
	Street-car fares	20	
Oct. 18.	R. R. fare, Indianapolis and return	7 56	
	Meals en route	3 00	
	Sleeper both ways	3 00	
	Claypool hotel	17 00	
	Street-car fares	60	
July 8.	Sleeper both ways	3 00	
			<hr/> \$79 48

W. H. Rudder—

May 9.	R. R. fare, Indianapolis and return	\$4 72	
	Claypool hotel	8 00	
	Cab	50	
July 8.	R. R. fare, Indianapolis and return.....	4 72	
	Street car fares	25	
	Claypool hotel	15 00	
	Meals en route	50	
Oct. 18.	R. R. fare, Indianapolis and return	5 82	
	Pullman car	1 00	

1907.

Oct. 18.	Claypool hotel	\$19 00	
	Meals en route	50	
			\$60 01

A. F. Heineman—

July 8.	R. R. fare, Indianapolis and return	\$9 12	
	Sleeper	2 00	
	Meals en route	1 00	
	Street-car fares	20	
	Claypool hotel	14 00	
Oct. 18.	R. R. fare, Indianapolis and return	9 75	
	Sleeper	2 00	
	Claypool hotel	18 00	
	R. R. fare, Whiting and return	1 08	
			\$57 15

OFFICE EXPENSES.

1906.

Oct. 30.	E. Berger, National Association dues.....	\$10 00	
Dec. 10.	Ribbon and carbon paper	95	
Jan. 10.	Printing questions (Woodworth)	3 50	
	Printing questions (Sala)	1 75	
	Printing questions (Otto)	3 50	
" 11.	Mooney-Mueller Drug Co.....	4 22	
	Telegram	80	
	Janitor Winona Institute	3 00	
Mar. 13.	Telephone service	55	
" 29.	Telephone service	60	
Apr. 4.	Printing questions (Woodworth)	4 50	
	Printing questions (Sala).....	2 75	
	Printing questions (Otto)	3 00	
	Telephone service	4 15	
May 7.	Telephone service	2 90	
" 29.	Wm. Sigmond	1 00	
" 11.	Paper for typewriter	90	
" 25.	Carbon paper	50	
June 1.	Telephone service	3 05	
July 8.	Printing questions (Heineman)	20 00	
	Printing questions (Rudder)	4 00	
May 21.	G. J. Mayer, repairs of seal	1 00	
	G. J. Mayer, one line stamp	12	
June 25.	Ribbon for typewriter	75	
July 1.	Telephone service	2 00	
" 8.	Paper and clips	80	
	Janitor, Winona	3 50	
	500 cards for examination	2 00	
	4,000 mailing tubes	28 60	
	4,500 gummed labels	9 00	
	5,050 return postals	21 50	
	100 question blanks	1 50	
" 11.	Printing questions (Otto)	2 50	
" 16.	Telephone service	45	

1906.

July 11.	Suit case	\$6 00	
" 27.	A. Kiefer, drugs	5 68	
Aug. 3.	Telephone service	2 10	
June 12.	2,500 litho. letterheads	14 10	
	500 application blanks	2 40	
	1,000 application affidavits	10 15	
	500 assistant pharmacists' certificates.....	26 85	
	4,000 registered pharmacists' certificates	212 35	
Oct. 1.	Telephone service	1 65	
" 8.	Telephone service	60	
" 7.	E. A. Thomas, prescription desks	65 50	
" 14.	Mooney-Mueller Drug Company.....	1 40	
" 17.	Winona Institute, janitor and drugs.....	10 53	
" 18.	Printing questions	9 00	
			\$517 65
Credit by error in voucher			1
			<hr/> \$517 64

POSTAGE, EXPRESS AND INCIDENTAL ACCOUNT.

1907.

Jan. 8.	Stamped envelopes	\$1 06	
" 18.	Stamped envelopes	11 97	
Apr. 11.	Stamps	2 00	
" 9.	Stamps	2 94	
" 25.	Stamps	2 00	
May 11.	Express	70	
" 17.	Express	75	
" 21.	Freight and drayage	1 37	
" 22.	Express	30	
" 28.	Express	75	
	Stamped envelopes	113 95	
June 2.	Stamps	5 00	
" 10.	Stamps	5 00	
" 21.	Stamps	5 00	
" 29.	Stamps	2 00	
July 2.	Stamps	2 00	
" 4.	Freight and drayage	40	
" 6.	Stamps	2 00	
" 15.	Stamps	146 24	
" 17.	Express	30	
" 20.	Express	35	
" 22.	Stamps	20 00	
" 24.	Stamps	32	
" 26.	Express	30	
" 29.	Stamps	4 00	
Aug. 2.	Stamps	4 00	
" 23.	Drayage	35	
Sept. 18.	Stamped envelopes	55	
" 25.	Stamped envelopes	55	
			<hr/> \$336 15

OPINIONS

OF

ATTORNEY=GENERAL JAMES BINGHAM.

February 3, 1908.

Hon. A. F. Sala, Secretary Board of Pharmacy, Winchester, Indiana:

DEAR SIR—Your communication on behalf of the State Board of Pharmacy received, in which you desire my opinion as to whether the board has the power to re-register a registered pharmacist, without examination, where he fails to renew his license on the first day of July, 1907, or within thirty days thereafter, as required by section 4 of the Pharmacy Law of 1907.

You also ask whether the board has authority to re-register a non-resident's license, without examination, where he failed to renew his license as required by said section 4.

An examination of the provisions of our Pharmacy Law discloses that as to the re-registration of a person holding a certificate from the board, no distinction is made between resident pharmacists and non-resident pharmacists, so that an answer to one of your questions will answer both of them.

It is provided in section 3 of the act of March 9, 1907 (Acts 1907, p. 317), "That nothing in this act shall require any pharmacist now holding a license under the laws of the State of Indiana to register under this act, excepting such pharmacist, upon the expiration of his present license, shall be required to re-register as provided by law."

Section 4 of said act provides that "All licenses issued under the provisions of this act shall be effective only for the unexpired portion of the two years preceding the next regular date of registration. Any person licensed under the provisions of this act shall be required to re-register by application, within thirty days after the expiration of such license, if he desires to continue as a pharmacist, or as an assistant pharmacist. Failure to comply with the foregoing provisions of this section shall subject the offender to a fine of not less than five dollars nor more than one hundred dollars for

each week which shall elapse thereafter and before such person shall re-register.”

These provisions are practically a re-enactment of provisions found in section 4 of the act of March 1st, 1899.

It is my opinion, under the provisions of section 4 above quoted, your board has the authority to re-register an applicant, whether resident or non-resident, without examination, where such applicant's registration expired on July 1st, 1907, and he has failed to re-register for thirty days thereafter, but such applicant, if he desires such re-registration without examination, is subject to a fine of not less than five dollars per week for the time elapsing since the expiration of thirty days after July 1st, 1907, and before he shall re-register. This fine, your board has authority to exact from such applicant before re-registering him.

Such an applicant, however, if he abandons his application for re-registration may thereby avoid being fined and might apply for examination and registration upon equal terms with other applicants.

I have the honor to be,

Yours very truly,

JAMES BINGHAM,
Attorney-General.

June 1, 1907.

Hon. A. F. Sala, Secretary, Indiana Board of Pharmacy, Winchester, Indiana:

DEAR SIR—Your communication of May 29th received, in which you request my opinion:

First—As to whether your board is required to grant registration to physicians without examination.

Second—Whether your board is compelled to grant registration without examination where the applicant is a graduate of a four-year course in a school of pharmacy, satisfactory to the board.

Third—Whether the board is required to grant registration without examination under the provisions of the third subdivision of §3 of the act of March 9th, 1907.

Fourth—Whether the board, at the time of registration on July 1, 1907, is authorized by law to register all assistant pharmacists as registered pharmacists, who were registered as assistant registered pharmacists prior to April, 1907.

Fifth—Whether the board is authorized to grant registration to E. W. Rawlings, under the facts stated in your letter and in applicant's affidavit, which you enclosed to me.

Sixth—Whether the rules adopted by the board, and enclosed by you for my examination, are within the law governing the board.

I shall answer your inquiries in the order in which they are asked.

There are three subdivisions in §3 of the act approved March 9, 1907 (Acts 1907, p. 317), and it is provided in this section that

“Upon the payment of such fee or fees as hereinafter provided, said board shall grant and issue a license as registered pharmacist or as registered assistant pharmacist to any person not less than eighteen years of age, as hereinafter provided, for two years or the unexpired portion thereof prior to the next regular date of registration, upon producing evidence satisfactory to said board of one of the following qualifications, to wit:”

The license is to be granted to the applicant whenever he “produces evidence satisfactory to said board of one of the qualifications” named, the first of which is that he shall pass a satisfactory examination, and produce and file evidence to satisfy the board that he has served four years in a store where prescriptions are compounded, or, in lieu of the four years' experience, that he is a licensed practicing physician.

To recapitulate, he must pass a satisfactory examination and show that he has had four years experience, or, he must pass a satisfactory examination and show by evidence that he is a regular licensed physician.

In any event, if he is to be granted registration, provided he has not been licensed before, he must pass a satisfactory examination and produce satisfactory evidence, either that he has had four years experience or is a licensed physician.

It is, therefore, my opinion that your first question must be answered in the negative.

It is my opinion that your second question must be answered in the affirmative.

It is provided in the second subdivision of said section 3 that “He shall be a graduate of a four year course in a school of pharmacy, which course must be satisfactory to the Board of Pharmacy.” This is one of the three qualifications required by registration, and it is my opinion if the applicant, having paid the fees required and being over eighteen years of age, produces evidence satisfactory to the board, that he is a graduate of a four years course in a school of pharmacy, which course is also satisfactory to

the board, that the board must grant him registration without examination. This is the plain meaning of the language used by the legislature in such section.

It is provided in the third subdivision of said §3 that

"He shall be a graduate of a full course in a school of pharmacy, which course must be satisfactory to said Board of Pharmacy, and if said course is for less than four years, in addition thereto, said applicant shall produce and file such evidence as is satisfactory to said board of having served in a store or pharmacy where physicians' prescriptions are compounded for a sufficient length of time to make such course and such service cover a period of four years, and such course of pharmacy shall not be less than two years."

It is my opinion that your third question must be answered in the affirmative, and that if an applicant for registration, who has not before been licensed by the board, submits satisfactory proof to your board that he is a graduate of a full course in a school of pharmacy, which course is satisfactory to the board, if it be for less than four years and not less than two years, and shall produce and file also satisfactory evidence that he has served in a pharmacy where physicians' prescriptions are compounded, for a sufficient time to make such course and such service together cover a period of four years, such applicant is entitled to registration without examination, other than an examination of his proofs.

In answer to your fourth question, it is my opinion the board has no authority to register as registered pharmacists, assistant pharmacists, unless it be upon the applications of such registered assistant pharmacists, and also that they either pass the examination required by the first subdivision of §3, or comply with the provisions of the second or third subdivisions of said section.

Section 3 fixes a different standard of qualifications for applicants who desire licenses as registered pharmacists, from those required from applicants desiring to be licensed as assistant pharmacists.

We have seen what is required of an applicant desiring a license as registered pharmacist. The following is required from an applicant desiring license as an assistant pharmacist:

"He shall have served as a clerk for one year in a store or pharmacy in which physicians' prescriptions are compounded, and shall pass a satisfactory examination before said board. In the case of an applicant for license as a registered assistant pharmacist, who is a graduate of a school of pharmacy of such standing and requirements as are satisfactory to the Board of Pharmacy, the actual time spent in attendance at such school shall be accepted as an equivalent for six months of service in a store or pharmacy where physicians' prescriptions are compounded."

In view of the different standards named in said section 3 for the two classes of druggists, it is my opinion that the board has no authority to license as registered pharmacists any persons except those who comply with the requirements of §3. The board has no power other than such as named in the act, except that it may "adopt rules to carry out the provisions of the act"; but it has no power to make any rule which is in conflict with the provisions of the act.

It is, therefore, my opinion that the board has no legal authority to register as registered pharmacists all assistant pharmacists who were registered as such prior to April, 1907.

I have also examined the rules adopted by the board, as required by your sixth question. I suggest that rule one, while a proper one, is hardly complete, since to secure a license as a registered pharmacist the applicant must pass an examination and produce evidence to satisfy the board either that he has had four years experience or that he is a licensed physician.

This rule makes no mention of the right of a physician who takes the examination in lieu of four years experience, to produce evidence that he is a licensed physician.

Rule nine, adopted by the board, provides that "All certificates of registration obtained by fraud or false representations shall be revoked by the Board of Pharmacy." While the act of March 9th makes no provision for revoking a license, still it is my opinion that where the applicant has been guilty of fraud in his application, the board has the right to revoke such a license.

A certificate of registration gives the holder the right to conduct a pharmacy, and this is in the nature of a property right, and it is my opinion that the rule should be amended so as to provide that before the board shall proceed to revoke a license, and take away his right thereunder, a notice be given to the holder, giving him a right to be heard. This will give him his day in court, and, after a hearing, the board's action in revoking such license will undoubtedly be legal.

I have the honor to be,

Yours very truly,

JAMES BINGHAM,
Attorney-General.

June 8, 1907.

Hon. A. F. Sala, Secretary, Indiana Board of Pharmacy, Winchester, Indiana.

DEAR SIR—Your communication of June 5th received, in which you ask for my opinion:

First—Whether under §8 of the act of 1899 (Acts 1899, p. 159) the registered assistant pharmacists have the same rights and privileges as the registered pharmacists.

Second—Whether under §6 of the act of March 9, 1907 (Acts 1907, p. 317), amending §8 of the act of 1899, registered assistant pharmacists have the same rights and privileges as the registered pharmacists.

Third—Why should not the Board of Pharmacy grant registered pharmacist certificates to all registered assistant pharmacists without examination?

Since §8 of the act of March 1, 1899, was amended by §6 of the act of March 9, 1907, it could not now be of any benefit to your board for me to express my opinion as to how it should have been construed.

By reference to my opinion to you under date of June 1, 1907, you will see that I gave it as my opinion that your board was not authorized to register assistant pharmacists as registered pharmacists, unless such assistant registered pharmacists comply with the requirements of §3 of the act of 1907, at the same time, giving you at length my reasons therefor (see my opinion of June 1, 1907, at page 4); and, upon re-examination I see no reason for changing the opinion then expressed.

It is apparent, from the provisions of §6 of the act of 1907, amending §8 of the act of 1899, that there is a clear distinction between the rights and privileges of assistant pharmacists and registered pharmacists, and that distinction you properly recognized by the rules submitted to me some days ago.

It is provided in this section "that a registered assistant pharmacist may be left in charge during the temporary absence of the registered pharmacist," etc., and to hold that each of the two classes of druggists have the same "rights and privileges" would be to ignore altogether the above provision of the law, a course not allowable.

It can not now be material what was a proper construction of §8 of the act of 1899, as §6 of the act of 1907 has taken its place, and it is my opinion that §6, when construed with the provisions of §3

of the act does not authorize your board to "grant registered pharmacist certificates to registered assistant pharmacists, who were registered as such prior to April, 1907, and who have had at least four years experience, without examination" (see my opinion of June 1, 1907, pages 4 and 5).

I have the honor to be,

Yours very truly,

JAMES BINGHAM,
Attorney-General.

PHARMACY LAW.

AN Act entitled an act to amend sections 1, 2, 3, 4, 7 and 8 of an act entitled "An act to protect the people of Indiana by requiring all persons selling at retail, or compounding for sale at retail, any poison, or compound containing a poison, providing exceptions, to be duly licensed; providing for registration and re-registration and time for each; providing for necessary examination of applicants for license and time for holding same, fixing amount of fees and time of payment; providing for the establishment of a board of pharmacy and for its maintenance, regulation and duties; providing necessary penalties for the violation of this act," which became a law without governor's signature March 1, 1899.

(S. 219. Approved March 9, 1907.)

Board of Pharmacy—Appointment—Terms.

Section 1. Be it enacted by the general assembly of the State of Indiana, That section 1 of the above entitled act be amended so as to read as follows: Section 1. On the taking effect of this act the governor of Indiana shall appoint five pharmacists, no more than three (3) of whom shall belong to the same political party, who shall constitute a board to be styled the Indiana Board of Pharmacy. Two members of said board shall be appointed and hold office for one year, one for two years, one for three years and one for four years, and each until his successor is appointed and qualified, and the term of office of each person thereafter appointed shall be four years. Annually after these first appointments the governor shall appoint pharmacists to fill vacancies as they occur by expiration of term of appointment. Any vacancy occurring at other times in said board shall be filled by a pharmacist appointed by the governor for the unexpired term. All of said appointments shall be made by the governor from pharmacists of recognized experience and ability, who are actually engaged in the retail drug business. No person in any manner connected with any school of pharmacy shall be eligible to serve on said board. Any member of said board may be removed by the governor for cause.

Oaths—Organization—Duties.

Sec. 2. Section 2 shall be amended so as to read as follows: Section 2. Each member of said board shall, within ten days after

his appointment, take and subscribe an oath or affirmation before a competent officer to faithfully and impartially perform the duties of his office. Should any appointee fail to qualify within the specified time his place shall be declared vacant, and the vacancy shall be filled as specified in section 1. Said board shall, within fifteen days after the appointment of its members, organize by the election of a president and a secretary from among its members, who shall hold office for one year and perform such duties as shall be prescribed by said board and as hereinafter mentioned. The board shall adopt such rules and regulations as it may deem necessary to carry out the provisions of this act. It shall provide and maintain facilities for conducting a practical examination in laboratory practice and prescription work. It shall direct prosecution and see to the enforcement of the provisions of this act. It shall report annually on the first Monday in December to the governor upon the condition of pharmacy in the state. It shall meet four times a year for the transaction of official business as follows: On the second Mondays of January, April, July and October, respectively, at such places as the board may select. At such meetings said board shall continue in session from day to day until the business of such meeting is complete, not, however, exceeding five days at any meeting. Three members of said board shall constitute a quorum.

License—Examinations.

Sec. 3. Section 3 shall be amended so as to read as follows: Section 3. Upon the payment of such fee or fees as hereinafter provided said board shall grant and issue a license as registered pharmacist or as registered assistant pharmacist to any person not less than eighteen years of age, as hereinafter provided, for two years or the unexpired portion thereof prior to the next regular date of re-registration, upon producing evidence satisfactory to said board of one of the following qualifications, to wit:

For registered pharmacist:

First. He shall pass a satisfactory examination before said board and shall produce and file such evidence as is satisfactory to said board of having served four years in a store or pharmacy where physicians' prescriptions are compounded, or that said applicant is a regularly licensed practicing physician.

Second. He shall be a graduate of a four-year course in a school of pharmacy, which course must be satisfactory to the board of pharmacy.

Third. He shall be a graduate of a full course in a school of pharmacy, which course must be satisfactory to said board of pharmacy, and if said course is for less than four years, in addition thereto, said applicant shall produce and file such evidence as is satisfactory to said board of having served in a store or pharmacy where physicians' prescriptions are compounded for a sufficient length of time to make such course and such service cover a period of four years, and such course of pharmacy shall not be less than two years: Provided, That nothing in this act shall require any pharmacist now holding a license under the laws of the State of Indiana, to register under this act excepting such pharmacist, upon the expiration of his present license, shall be required to re-register as provided by law. In the case of an applicant for license as a registered pharmacist, who is a graduate of a school of pharmacy of such standing and requirements as are satisfactory to the board of pharmacy, the actual time spent in attendance at such school shall be accepted as an equivalent for a term of service of equal length in a store or pharmacy where physicians' prescriptions are compounded.

For registered assistant pharmacist: He shall have served as a clerk for one year in a store or pharmacy in which physicians' prescriptions are compounded, and shall pass a satisfactory examination before said board. In the case of an applicant for license as a registered assistant pharmacist, who is a graduate of a school of pharmacy of such standing and requirements as are satisfactory to the board of pharmacy, the actual time spent in attendance at such school shall be accepted as an equivalent for six months of service in a store or pharmacy where physicians' prescriptions are compounded. Said board may, in its discretion, grant and issue a license without examination, as registered pharmacist or as registered assistant pharmacist, to any person who shall produce to said board a certificate of registration of like tenor from another state subject to the conditions of this act.

Fees—Re-Registration.

Sec. 4. Section 4 shall be amended so as to read as follows: Section 4. The fees for registered pharmacists shall be as follows: For examination, \$5.00; for re-registration, \$2.00; for registration by certificate from another state, \$15.00. The fees for registered assistant pharmacists shall be as follows: For examination,

\$3.00; for re-registration, \$1.00; for registration by certificate from another state, \$5.00. All fees shall be paid to the secretary of the board with the application. All licenses issued under the provisions of this act shall be effective only for the unexpired portion of the two years preceding the next regular date of re-registration. Any person licensed under the provisions of this act shall be required to re-register by application within thirty days after the expiration of such license, if he desires to continue as a pharmacist or as an assistant pharmacist. Failure to comply with the foregoing provisions of this section shall subject the offender to a fine of not less than five dollars nor more than one hundred dollars for each week which shall elapse thereafter and before such person shall re-register.

Sec. 5. Each applicant for registration or examination shall produce and file with his application such evidence touching his qualifications as may be prescribed by the rules and regulations of the board.

Sec. 6. The secretary of the board shall, before entering upon the duties of his office, execute an official bond, approved by the governor, payable to the State of Indiana, in the penal sum of one thousand dollars, conditioned for the faithful discharge of the duties of his office. He shall keep a record of the doings of the board, which record shall contain the names and residences of all the applicants and the action taken on their respective applications. He shall, at the close of each meeting of the board, transmit to the secretary of state for record, a list containing the names and residences of such persons as shall have received licenses as registered pharmacists, and also a list containing the names and residences of such persons as shall have received licenses as registered assistant pharmacists at such meeting of the board. The secretary of the board, upon the order of the auditor of state, shall transmit to the treasurer of state all moneys received by him as secretary, together with a sworn statement of the expenses of said board at such meeting, which moneys shall be held for the payment of the salaries and expenses of the board, as provided in section 7 of this act. The secretary of the board shall notify each holder of said license or certificate the date of the expiration of said license or certificate, not less than thirty days nor more than sixty days prior to the expiration of said license or certificate.

Pay and Salary.

Sec. 5. Section 7 shall be amended so as to read as follows:
 Section 7. Each member of the board, except the secretary, shall receive five dollars per day for each day actually engaged in service of the board, together with the necessary expenses incurred in the performance of his strictly official duties, an itemized statement of which must be filed with the auditor of state. The secretary shall receive not to exceed fifteen hundred dollars per annum, and necessary traveling or other expenses; said salary to secretary to be paid in monthly installments, upon the order of the auditor of state. Upon the order of the auditor of state, the compensation and expenses of said board shall be paid out of the fund in the state treasury arising from the fees as provided in section 4, and in no one case shall any of the said compensation and expenses be paid out of the general fund in the state treasury.

Poisons—Sales Prohibited—Exceptions.

Sec. 6. Section 8 shall be amended so as to read as follows:
 Section 8. On and after July 1, 1899, it shall be unlawful for any person to conduct a store or pharmacy in which is sold at retail, or to sell at retail, any chemical, drug or medicine which is poisonous, or which contains a poison; or to compound for sale at retail any physician's prescription unless there be in charge a registered pharmacist under the provisions of this act: Provided, however, That a registered assistant pharmacist may be left in charge during the temporary absence of the registered pharmacist, which temporary absence shall be construed in conformity with the ruling of the board of pharmacy: And provided, That nothing in this act shall apply to, nor in any manner interfere with the business of a regularly licensed physician in compounding for and supplying his patients with such medicines as may seem to him proper in his professional capacity as a physician. And provided, That nothing in this act shall apply to nor in any manner interfere with the business of a general merchant in selling any of the following articles, to wit: Medicines of secret composition, and which are advertised to the general public, and popularly known as patent or proprietary medicines, providing such medicines are not poisonous. Also concentrated lye, sodium carbonate, sodium bicarbonate, tobacco, spices, perfumes, flavoring extracts, borax and the following articles in original and unbroken packages, bearing the label of a known pharmaceutical manufacturer, wholesale druggist, or of a registered

pharmacist, to wit: Paregoric, hive syrup, spirit of camphor, tincture of arnica, epsom salt, quinine sulphate, compound cathartic pills, paris green, london purple, white hellebore, and such insecticides, disinfectants, dyestuffs and other chemicals as may be allowed by the board of pharmacy.

Sec. 9. Any person violating any of the provisions of section 8, of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in any sum not exceeding one hundred dollars, nor less than five dollars for each offense.

THE INDIANA BOARD OF PHARMACY.

BOARD RULINGS IN EFFECT MAY, 1907.

Qualifications for Registration.

1. As a Registered Pharmacist.—The Pharmacy Law requires that applicants for registration by examination shall be not less than eighteen (18) years of age, and shall have had not less than four (4) years practical experience in a retail pharmacy where physicians' prescriptions are compounded, and conducted by a legally registered pharmacist. To pass the examination a Registered Pharmacist must acquire a general average of not less than 75% and must have not less than 60% in any one branch.

2. As a Registered Assistant Pharmacist.—The Pharmacy Law requires that applicants for registration by examination shall be not less than eighteen (18) years of age and shall have had not less than one (1) year's practical experience in a retail pharmacy where physicians' prescriptions are compounded, and conducted by a legally registered pharmacist. To pass the examination Registered Assistant Pharmacist must acquire a general average of not less than 75% and must have not less than 60% in any one branch.

3. Fees.—The fees for a Registered Pharmacist by examination shall be \$5.00, and for a Registered Assistant Pharmacist \$3.00.

4. Where an applicant for registration as a Registered Pharmacist is a graduate of a school of pharmacy of such standing and requirements as are satisfactory to this board of pharmacy, the *actual* time spent in attendance will be accepted as an equivalent to time spent in a retail drug store; that an applicant for Registered Assistant Pharmacy can get only 6 months store credit on a diploma from a school of pharmacy.

5. Each applicant for registration shall be required to furnish evidence, satisfactory to this board, which must be made under oath before a properly qualified officer as to his or her age, and by affidavit from former and present employers of having had the necessary amount of experience, as required by the laws of Indiana, in a retail drug store where physicians' prescriptions are com-

pounded and which is conducted by a Registered Pharmacist, giving dates and number of months under each; or wishing to count the time spent in a college of pharmacy, as required by the laws of Indiana, can file his or her diploma with this board to be used as evidence; or an affidavit signed by the dean of the college giving name of such college, number of months in attendance, and date of same and date of graduation.

6. To pass the examination the candidate will be required to answer a sufficient number of questions, both written and oral, in theoretical and practical chemistry, materia medica, pharmacy, weights and measures, toxicology, posology, and give a practical demonstration in laboratory work, prescription reading and identification. (And other subjects if necessary.)

7. The applicant for Registered Assistant Pharmacist will only be required to pass a satisfactory examination on specially prepared questions suitable to their limited experience.

8. All applications for registration must be made under oath before a qualified officer. The law makes it a felony for any person to make a false statement under oath for the purpose of securing registration for himself or for another person.

9. All certificates of registration obtained by fraud or false representation shall be revoked by the board of pharmacy.

10. Meetings for the registration of applicants by examination occur four times a year on the dates: Beginning on the second Monday of January, April, July and October respectively, and for five days if necessary, at such places as the board may select.

11. If an applicant not previously registered as a Registered Assistant Pharmacist, on examination fails to attain the percentage required for Registered Pharmacist he may, if he or she so elects, be registered as Assistant Pharmacist, provided he or she has made an average grade of 70 per cent., with not less than 60 per cent. in any one branch. But if the applicant does not accept registration as a Registered Assistant Pharmacist, he cannot again take the examination without making a new application and tendering fees, etc., as previously described.

12. Private examinations will not be given regardless of any reason for such request. The secretary will notify each candidate of the date and hour of the examination, when the applicants must appear or forfeit the privilege of taking the examination at that meeting.

13. Each certificate must be conspicuously displayed in the pharmacy in which the holder thereof is employed or conducting a business. (This is for your protection and may save you annoyance.)

14. Each holder of a certificate shall, within ten days after changing his or her place of business or employment as designated by his or her certificate, notify the secretary of the board of such change. The necessary changes will then be made. (For the holder's benefit.)

15. A physician's certificate does not give him the right to practice pharmacy in Indiana. Under the Pharmacy Law, he or she has no right to sell drugs or poisons, or fill prescriptions, other than his own, unless he be registered as a pharmacist.

16. In case of loss of certificate when absolute and unquestioned proof of such loss is furnished this board, a duplicate certificate may be issued on payment of one dollar (\$1.00).

17. The Board of Pharmacy has not the right to grant a permit or privilege to any person to conduct a drug store without there being in charge a Registered Pharmacist: Provided, That this board may, upon presentation of evidence satisfactory to this board, accompanied by an application and necessary fee for examination for Registered Pharmacist, grant a permit or privilege to be employed in a pharmacy, which permit or privilege shall be for not longer than the date of the first examination following, nor shall it be for a different grade than his or her evidence may justify this board in granting: Provided, That no second permit or privilege shall be issued to the same person within a period of two years after.

19. When an applicant files his or her application for examination he or she shall appear before the board at the first regular meeting. Failure to do so, his or her application shall be declared forfeited and fees paid into the state, as provided by law.

20. Temporary Absence.—Temporary absence of the Registered Pharmacist when an Assistant Pharmacist may be left in charge is defined by the Board of Pharmacy as follows:

(A) Absence not to exceed one and one-half ($1\frac{1}{2}$) hours for meals, no notice to the board required.

(B) Absence of over one and one-half ($1\frac{1}{2}$) hours and not to exceed three continuous days on account of sickness or death in family of self or immediate relatives, with notice of such fact, giving name and number of certificate of assistant in charge to the secretary of the board.

(C) Absence for a continuous period longer than three days: A permit must be obtained upon application, for Assistant Pharmacist to take charge; such an application shall state name and number of certificate of Assistant Pharmacist to be placed in charge, and his competency shall also be certified to by said Pharmacist, and such Pharmacist shall not place such Assistant Pharmacist in charge until such evidence is furnished to said board and a permit so to do obtained.

(D) Said permit as above provided for may be issued by this Board of Pharmacy, signed by its president and secretary, and shall be conspicuously displayed in the pharmacy to which it applies. If such evidence as mentioned under A, B, C and D of section 20 is satisfactory to the board.

21. This board will grant certificate of registration to non-residents of the State of Indiana, but residents and citizens of the United States or its colonies, upon either of the following conditions, viz.:

(A) The applicant must present to this board at any of its regular meetings, a certificate of registration from the state, territory or colony in which he or she may have been examined, accompanied by a statement from the secretary of the Board of Pharmacy of the state or territory or colony in which he or she may have been examined, and which statement must be sent direct from said secretary of said Board of Pharmacy to the secretary of the Indiana Board of Pharmacy, showing that said certificate was issued to the applicant on an examination in which his or her average shall have been not less than 80 per cent., and that he or she shall have had not less than four years practical experience in a pharmacy conducted by a registered pharmacist, and shall be not less than twenty-one (21) years of age. In case such evidence shall not prove satisfactory to this board the certificate applied for shall not be granted, but the fee shall be returned to the applicant. The fee for registration as provided for in this rule, shall be fifteen (\$15.00) dollars: Provided further, That if required by this board, a copy of the questions asked at the examination taken by and successfully passed by the applicant shall be furnished to this board, and said questions shall be in the English language.

(B) A person having had twenty (20) years' bona fide experience in a retail drug store or pharmacy, or being a graduate of a reputable school of pharmacy, the actual time spent in attendance at same, with sufficient experience in a retail drug store or pharmacy to make twenty (20) years, may be granted a certificate of

registration upon presentation of certificate; said certificate must be in force when application to this board is made and evidence satisfactory to this board from another state. The fee of fifteen (\$15.00) dollars must accompany the application.

22. All examinations to be conducted in the English language and Pharmacopoeial Latin terms.

23. That after January 1, 1906, the privilege of counting time spent at a college of pharmacy as equivalent to an equal length of time in a drug store shall be granted only to graduates of such a school or college of pharmacy as conforms to the following standard:

1. The school or college of pharmacy shall require that its candidates for admission show evidence of either having completed the first year in a commissioned high school, or of having completed an equivalent amount of work in any other school or academy.

2. Said school or college of pharmacy shall require for graduation an average grade of not less than 75 per cent.

3. The course shall consist of at least two school years of not less than twenty-six weeks each, excluding holidays.

4. During the school year sufficient school work shall be provided so as to make clerking in a store impracticable.

24. In case any applicant is dissatisfied with the grading made in any or all of said applicant's papers, he may have those papers regraded by any recognized member of any faculty of any school of pharmacy of Indiana that said applicant shall elect, providing said request be made before the next following examination, and said regrading shall be accepted as final, and shall be at the expense of said applicant.

REGISTERED PHARMACISTS

TO WHOM CERTIFICATES WERE ISSUED IN 1907.

ALPHABETICALLY ARRANGED.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Abram, B. Robert	Butler	5248
Abrams, Frank E.	Ray	265
Abbott, Howe	Indianapolis	5249
Ackers, Rose C.	Elkhart	2799
Ackers, Charles A.	Elkhart	2800
Adair, Alpheus A.	Portland	1298
Adair, Charles P.	Portland	1299
Adair, John A. M.	Portland	1300
Adair, Albert E.	Indianapolis	2738
Adair, Samuel Lowery, Sr.	New Washington	77
Adair, Samuel Lowery, Jr.	New Washington	76
Adair, Mollie E.	Bethlehem	478
Addison, Iverson R.	Cadiz	441
Adams, Joseph H. B.	Indianapolis	2826
Adams, Clarence W.	Columbus	2747
Adams, James Bennett.	Indianapolis	2826
Adams, Claude Veiley.	Indianapolis	2417
Adams, J. L.	Richmond	1510
Adams, Mc. Crillus.	Petersburg	3405
Adams, Ovid L.	Shelbyville	1990
Adelsperger, Thomas	South Bend	3907
Adelsperger, Bernard	Muncie	5477
Ader, Henry M. D.	Somerset	323
Agness, Sylvester	Converse	805
Agness, Benjamin F.	Converse	472
Agness, Rudolph B.	Royal Centre	827
Agness, Merle	Amboy	826
Albersmeyer, Christian H.	Fort Wayne	3710
Albert, H. F.	Freelandville	921
Albert, Martin J.	Indianapolis	922
Aldred, John A.	Hortonville	3730
Alexander, John T.	Greensburg	3016
Alexander, Stephen J.	New Albany	808
Alexander, Joe H.	Indianapolis	3017
Alexander, V. H.	Roll	1231
Alford, Thos. A.	Indianapolis	3817
Alford, Chas. H.	Fortville	2536
Alleman, Harry E.	Argos	5446

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Allemong, Harry M.....	Indianapolis	5011
Allen, John C.....	South Milford	1888
Allen, Charles B.....	Marion	254
Allen, Lewis W.....	New Albany	2958
Allen, Grafton C.....	Lebanon	3918
Allen, Le Roy	Indianapolis	486
Allen, James L.....	Terre Haute	5425
Allen, Granville G.....	Indianapolis	429
Allen, John B.....	Cambridge City	3701
Allen, John W.....	New Maysville	1228
Allen, Walter	Greencastle	387
Allen, Emelia	Terre Haute	764
Allen, Albert	Greencastle	402
Allison, Edward H.....	Indianapolis	3659
Andrews, Albert M.....	Connersville	757
Andrews, Arthur F.....	Muncie	2622
Andrews, Walter M.....	Muncie	2497
Anderson, O. Bela	Salem	5135
Anderson, Elbert	Carlisle	2513
Anderson, John William	Matthews	5176
Allen, William O.....	New Maysville	1227
Anderson, Daniel	Mishawaka	939
Anderson, Charlie M.....	Mt. Etna	363
Anderson, James L.....	Indianapolis	1331
Andrews, Josiah H.....	Seymour	5056
Anderson, Orlando	Hartford City	2360
Anderson, Geo. F.....	Mt. Etna	2664
Anderson, Sheldon S.....	Terre Haute	1321
Anderson, John A.....	Geneva	1028
Ansley, Elmer J.....	Marion	2392
Antonides, John E.....	Lagrange	1752
Apple, Anderson	Salem	3653
Applegate, Jas. B.....	Perkinsville	2772
Applegate, Samuel T.....	South Bend	212
Archibald, Joseph G.....	Battle Ground	2810
Armstrong, Fred	Terre Haute	1185
Armstrong, Thomas F.....	Florence	3636
Armstrong, James T.....	Hammond	1798
Armstrong, Roy D.....	Valparaiso	5390
Arnett, Will N.....	Indianapolis	17
Arold, Edward J.....	Indianapolis	5413
Asbury, W. H. H.....	Clay City	800
Ashworth, James Lewis.....	Connersville	1622
Ashman, Chas. S.....	Frankfort	1332
Asperger, Fred H.....	Riley	1169
Aspy, Hiram M.....	Geneva	1741
Aspinwall, Novitas B.....	Plymouth	797
Atchison, Harry O.....	Indianapolis	2154
Atwood, Merrill T.....	Geneva	151

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Atwood, Lida I.....	Geneva	414
Arvine, James D.....	Etna Green	787
Aubry, Edward A.....	Hammond	2568
Aubry, Joseph A.....	Hammond	2434
Aughe, Chas. G.....	Frankfort	5169
Aughinbaugh, Edward L.....	Indianapolis	5113
Aurt, Frederick Thos.....	Tennyson	2380
Aurenz, John Daniel	Lafayette	5375
Austin, Thomas E.....	New Albany	2805
Austin, Charles K.....	Worthington	5395
Austin, Alfred B.....	Terre Haute	135
Austin, Isaac B.....	Noblesville	1957
Austin, James A.....	Worthington	1374
Auw, M. Joseph	Ora	2088
Avery, George T.....	New Augusta	3169
Averitt, Carl H.....	Terre Haute	1357
Awalt, George	Chili	1175
Axline, Will E.....	Noblesville	1958
Bachman, Karl Robert	Wabash	5422
Bader, Henry Frederick	New Albany	239
Bader, Oscar Otto	New Albany	238
Bailey, Preston B.....	Southport	3525
Bailey, La Salle F.....	Ridgeville	2697
Bailey, Hassen E.....	St. Paul	2975
Bailey, Edwin H.....	Greensburg	5219
Bailey, Robert M.....	Bedford	5405
Baird, Wm. H.....	Indianapolis	1435
Baker, William Lemon	Indianapolis	502
Baker, Nina Ross.....	Shoals	311
Baker, Jerome C.....	Huntington	2284
Baker, Charles W.....	Wolcott	754
Baker, Sherman M.....	Roann	1279
Baker, Ernest L.....	Anderson	1350
Bakhaus, D. M.....	Indianapolis	1820
Bakhaus, George W.....	Indianapolis	748
Ball, Joseph M.....	Terre Haute	3853
Ballard, D. J.....	St. Paul	3178
Baldum, Arry G.....	Noblesville	2172
Ballenger, John E.....	Sharpsville	2522
Ballinger, John A.....	Marion	14
Ballou, Emoe S.....	Lagrange	1753
Banta, Horton	Indianapolis	1335
Bantz, G. W.....	North Vernon	2548
Barbre, John V.....	Farmersburg	1676
Barger, William	State Line	1559
Barker, J. H.....	Pulaski	3783
Barker, Henry A.....	Westfield	3633
Barkley, Jno. Clark	W. College Corner	2665
Barns, James M.....	Mier	685

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Barns, Theo. S.....	Sullivan	2276
Barnard, Enola	Millersburg	2727
Barnard, William B.....	Millersburg	2050
Barnhart, Bert	Indianapolis	5240
Barnum, Chas. E.....	Indianapolis	3118
Baron, Chas. F.....	Indianapolis	62
Barr, Robert D.....	Bruceville	743
Barnett, Moses	Evansville	1073
Barnett, George F.....	Cicero	2545
Barnett, Roscvoe	Cicero	2546
Barrett, Thos. F.....	Albany	2071
Barrett, George T.....	Cowan	128
Barton, William W.....	Milroy	1407
Bartlett, J. D.....	Lafayette	2794
Bass, George W.....	Mooreville	380
Bass, Charles W.....	Martinsville	3716
Baas, Mrs. Geo. A.....	Batesville	900
Bass, Frank R.....	Mooreville	379
Basham, Rufus	Wallace	2955
Bassett, Homer D.....	Indianapolis	1859
Bastian, Otto C.....	South Bend	733
Basye, Taylor C.....	Rockport	2578
Baur, Arthur	Terre Haute	136
Baugh, John A.....	Vincennes	371
Baughman, Lemuel B.....	Danville	2219
Batchelor, Frank E.....	Indianapolis	2443
Bates, H. E.....	Kokomo	2970
Batase, Omer C.....	Bunker Hill	2969
Batey, Charles F.....	Sullivan	2436
Batterton, Frank	Greensburg	725
Batterton, John H.....	Greensburg	726
Batterton, Edwin D.....	Greensburg	5201
Black, James H.....	Terre Haute	2273
Black, Ira D.....	Fremont	3367
Black, William R.....	Blaine	3147
Black, Frederick Lee.....	Terre Haute	2126
Blackburn, Page	Decatur	1045
Blackburn, Ravid F.....	Fortville	2698
Blackketter, Geo. S.....	Indianapolis	2812
Blain, John	Plymouth	519
Blain, Clement F.....	Plymouth	506
Blair, Wm. M.....	Terre Haute	5107
Blair, D. J.....	Newville	3652
Blakely, G. H.....	Warrington	3327
Blase, Garland E.....	Mt. Vernon	5367
Blank, Edward J.....	Batesville	5218
Bradshaw, Thomas E.....	Thorntown	130
Bradford, Miles P.....	Goshen	513
Bragdon, Robert E.....	Anderson	917

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bradley, Chas. E.....	Wabash	2363
Bradley, Clarence	Wabash	2361
Bradley, Oscar E.....	Huntington	2170
Brand, John W.....	Columbia City	195
Brandaw, Harvey L.....	Indianapolis	5492
Braman, Frank R.....	Mitchell	3296
Branaman, C. A.....	Bedford	475
Brannock, Benj. B.....	Evansville	119
Brant, C. E.....	Lagrange	2068
Beam, William H.....	New Castle	2213
Bean, Leonard B.....	Indianapolis	1627
Bean, Carlton W.....	Indianapolis	491
Bear, Will H.....	Terre Haute	1508
Beard, Chas. P.....	Evansville	2803
Beard, Clayton Riley.....	Cambridge City	2511
Beard, John W.....	Cambridge City	1995
Beaty, G. S.....	Freeland Park	2857
Beatty, William S.....	Hartford City	1196
Beavo, Maybelle S.....	Fort Wayne	5482
Beasley, Wm. A.....	Fairmont	1009
Beazley, Elden	Union	106
Bechtol, Clarence I.....	North Manchester	362
Beck, Martin C.....	Albion	2034
Becker, Walter F.....	Middletown	501
Beckman, Frederick G.....	Indianapolis	3867
Bechstem, Adolph C.....	Huntington	665
Beddoe, Robert I.....	Bedford	969
Bedford, George T.....	Indianapolis	2731
Bedford, Dr. C. T.....	Indianapolis	2732
Bedwell, Theophilus S.....	Dugger	2290
Beeson, O. J.....	Goshen	567
Beggs, Otto S.....	Camden	1522
Beidler, Solomon W.....	Waterloo	3834
Beiling, Homer C.....	Tell City	5173
Beiling, Harry L.....	Evansville	1388
Bell, John David.....	Harrodsburg	705
Bell, A. Howard.....	Gary	5415
Bell, Foster Merton.....	Indianapolis	5321
Bell, Herman A.....	Fort Wayne	5162
Bell, Andrew M.....	Lebanon	2115
Bell, Frederick	Inwood	2329
Belles, Johnnie	Wallace	2954
Bence, James Franklin	Clinton	5136
Benedict, Hanford	Springport	113
Benell, Charles	Diamond	3194
Benigna, Sister M.....	Lafayette	5149
Benke, Arthur	Fort Wayne	2942
Benkie, John G.....	Kouts	90
Bennett, Herschel V.....	Shelburn	5377

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Benninghoff, William Franklin.....	Fort Wayne	5151
Benson, Warner N.....	Indianapolis	5017
Bentley, Earl D.....	Lafayette	5302
Benton, Arthur Tinsley.....	Bloomington	5233
Benton, D. L.....	Fort Wayne	2127
Berger, Nelson K.....	South Bend	5123
Berghuis, Henry	Lafayette	3618
Berkey, William H.....	Elkhart	545
Berner, Louis E.....	Indianapolis	1539
Berry, Alex. M.....	Freelandville	3049
Berry, Geo. L.....	West Terre Haute.....	935
Berry, John E.....	Larwill	188
Bersell, F. G.....	Indianapolis	998
Bersel, Louis	Evansville	281
Bessel, Bethia	Evansville	282
Best, Harry T. S.....	Richmond	1330
Best, Frank Merrell.....	Lafayette	2100
Betts, Wm. C.....	Washington	2707
Bevis, M. J.....	Hymera	2587
Bevier, Frank	Waterloo	2629
Bevier, Effie A.....	Waterloo	2631
Beverforden, H. F.....	Fort Wayne	1863
Brehm, Bernhard	Indianapolis	260
Brenner, Clarmont	Indianapolis	645
Brenner, Bert L.....	Rensselaer	1050
Brennan, John F.....	Logansport	1635
Brennan, Mrs. J. F.....	Logansport	1636
Brewer, William E.....	Greenwood	2688
Brewer, Harvey	Greenwood	2687
Brewster, James B.....	Corydon	144
Brewster, Frank W.....	Fortville	529
Bibbins, Francis E.....	Indianapolis	5189
Bickel, John A.....	Goshen	2471
Bicknell, Henry M.....	Hammond	1381
Biggs, Edwin T.....	Princeton	5339
Biggs, William M.....	Kewana	5412
Biggs, Floyd J.....	Princeton	99
Bigney, Minnie	Sunman	538
Bigney, Verado W.....	Sunman	537
Bill, Jacob	Fort Wayne	1392
Bill, Herman	Fort Wayne	1393
Bindley, John Bruce.....	Terre Haute	3067
Bindley, Edward H. Jr.....	Terre Haute	3820
Bird, David P.....	Princeton	39
Bireley, William H.....	Alexandria	1094
Birk, Harry Albert.....	Indianapolis	1497
Birk, William M.....	Indianapolis	20
Bishop, O. L.....	Shelbyville	860
Brier, S. W.....	Hope	5432

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bittle, Alonzo L.....	Wingate	2140
Bittle, J. Luther.....	Wingate	2155
Brickley, Eugene T.....	Anderson	2741
Brickles, Jerry H.....	Knox	5440
Brigham, F. L.....	New Albany	3546
Bringhurst, Alfred T.....	Logansport	50
Brink, John J.....	Fort Wayne	2043
Brink, Clem J.....	Fort Wayne	2044
Brinker, Henry J.....	Evansville	1576
Brinker, Hulda	Evansville	2300
Bright, John	Wabash	5114
Britton, Walter S.....	Crawfordsville	306
Brizius, Herman	Newburg	5408
Boatman, Frank J.....	Lawrence	2529
Bochner, Wm.....	Vincennes	2022
Bochner, Albert M.....	Vincennes	2504
Bogarte, M. E.....	Valparaiso	3109
Boggs, Moses Taylor.....	Indianapolis	1721
Bohn, George W.....	Evansville	101
Bohrer, Otto	Evansville	1495
Bolin, Esau L.....	Hoosierville	2774
Bolin, R. M.....	Indianapolis	375
Bouker, James J.....	La Otto	2843
Bomm, Prosper X.....	Evansville	1755
Bomm, Leonard C.....	Evansville	1756
Bonar, Fred J.....	Hamlet	2231
Bonebrake, James O.....	Veedersburg	1213
Bond, James T.....	Jasonville	1259
Boner, John W.....	Elizabethtown	3443
Boner, Emery	Marco	1042
Bonner, Samuel A.....	Greensburg	605
Bonifield, T. U.....	Warren	1338
Bonhaus, Carl	Bluffton	3634
Booe, John A.....	Crawfordsville	1760
Boos, Geo. A.....	Batesville	901
Boor, A. M.....	Veedersburg	488
Boor, James R.....	Cayuga	1671
Boor, H. Moffett.....	Cayuga	1670
Boothe, M. A.....	Brazil	2754
Boppart, Adolph	Richmond	40
Borgman, J. H. Jr.....	Evansville	1268
Borgman, Pauline	Evansville	1269
Borst, George F.....	Indianapolis	2469
Borst, Harry J.....	Indianapolis	3028
Bortsfield, W. Grant.....	North Vernon	2817
Boswell, David A.....	Indianapolis	3177
Boswell, Edwin	LaFayette	604
Bostwick, Edward W.....	Elkhart	903
Bottorff, John C.....	Corydon	1325

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bottorff, Charles M.....	Charlestown	3172
Bottorff, Katie P.....	Charlestown	3171
Bottorff, Charles M.....	Kokomo	3356
Bourne, Carl E.....	Coalmont	5182
Bourne, Earl S.....	Terre Haute	5468
Bourgoune, Charles Louis.....	Indianapolis	1317
Bowell, De Alton H.....	Rolling Prairie	868
Bowens, Adrian	Indianapolis	2186
Bowles, Homar E.....	Muncie	3249
Bowles, W. T.....	Bloomington	1952
Bowles, James A.....	Bloomington	1953
Bowlin, Charles L.....	Elwood	3921
Bowlin, Ernest A.....	Huntington	3004
Bower, Edmund D.....	Osgood	2931
Bowman, F. R.....	Spencerville	2458
Bowman, Reuben	Peru	2368
Bowman, Fred E.....	Monticello	2259
Bowman, Hiram F.....	Bourbon	3121
Bowmaster, M. L.....	Cambridge City	2326
Boyd, Thomas H.....	Laporte	2879
Boyd, Chas. L.....	Paoli	3390
Boyer, B. N.....	Whiting	1328
Boyer, Ella M.....	Whiting	1329
Blocher, Otto B.....	West Baden	5314
Blodau, Robert P.....	Indianapolis	3602
Brobst, A. H.....	Elwood	5393
Brock, Keller T.....	Indianapolis	5246
Brock, Chas.....	Ewing	666
Brocksmith, Wm. H.....	Vincennes	1442
Broich, Charles H.....	Indianapolis	1364
Bronaugh, James T.....	New Ross	1937
Brooks, Onas W.....	Indianapolis	656
Brookshire, Swan	Indianapolis	1245
Broshar, John E.....	Lebanon	3693
Brown, Frank L.....	Knox	5101
Brown, Fred J.....	Lagrange	2163
Brown, Frank D.....	Amboy	3001
Brown, William W. C.....	Lafayette	2655
Brown, Sylvester L. Jr.....	Owensburg	410
Brown, James D.....	Burnettsville	1991
Brown, William S.....	Crawfordsville	3107
Browne, Le Roy E.....	Richmond	2922
Brown, Leonard	Evansville	507
Brown, George M.....	Evansville	280
Brown, Ernest Ames.....	Lafayette	553
Brown, Karl T.....	Crawfordsville	3894
Brown, Aaron R.....	Mooreland	2833
Brown, Guy C.....	Indianapolis	3193
Brown, Paul D.....	Knightstown	2058

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brown, James F.....	Owensburg	411
Brown, Lemos L.....	Kirkpatrick	316
Brown, Charles	Salem Centre	155
Browning, Robert C.....	Indianapolis	3625
Buck, Jenne	Star City	2310
Buck, T. P.....	Star City	2311
Buchanan, B. F.....	Rising Sun	3902
Buchanan, Albert D.....	Whiting	1719
Buchanan, Rea	Logansport	3863
Buechner, Edwin John.....	Laporte	5357
Buckner, J. P.....	Covington	378
Bullington, Frank L.....	Indianapolis	888
Bunch, Cora A.....	Plainville	156
Bunch, William H.....	Plainville	181
Bunnell, K. C.....	Hammond	3103
Buntin, Wm. C.....	Terre Haute	1320
Burgess, Hiram	Goodland	1371
Burget, W. H.....	Indianapolis	3391
Burk, William C.....	Thorntown	1039
Burke, William H.....	Scotland	2759
Burke, Franklin Lewis.....	Bloomfield	92
Burkley, Oscar J.....	Goshen	1133
Burns, Hardy W.....	New Port	2402
Burns, Joseph B.....	Terre Haute	1270
Burns, James L.....	Brazil	2403
Burns, Lawrence	Otterbein	1156
Buron, Jacob J.....	Indianapolis	63
Burrell, John B.....	Brownstown	2038
Burrin, Thomas E.....	Waveland	927
Burrin, Frank T.....	Waveland	5337
Burton, Walter W.....	Mitchell	821
Bush, Chas. O.....	Lafayette	5229
Busby, Thomas M.....	Lapel	682
Busjahn, John J.....	Logansport	2597
Bussing, B. J.....	Evansville	2758
Butler, J. T.....	Knightstown	1682
Butler, Sam'l Goode.....	Terre Haute	2268
Butler, Charles W.....	Oakland City	2073
Butler, Chas. D.....	Scipio	2033
Butterbaugh, O. L.....	Wabash	2364
Button, C.....	Fortville	5027
Butts, F. E.....	Elberfeld	189
Butsch, John Louis.....	Terre Haute	2517
Buxton, Robt. W.....	Shelbyville	2855
Buyse, Philip Edward.....	Bluffton	125
Buzby, Franklin T.....	South Bend	550
Blue, Harry Earl.....	Star City	5360
Bruch, Calvin C.....	Marion	2166
Bruch, Walter L.....	Marion	1594

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brundick, Ernest R.....	Huntingburg	1935
Bruner, Mason	Linton	1262
Brunner, Joseph F.....	Terre Haute	5221
Brunson, Vincent C.....	Newville	2470
Bruss, T. N.....	Brookston	2594
Bryan, W. A.....	Idaville	1116
Bryant, John C.....	Perryville	1791
Bryant, Roy James.....	Bloomington	5342
Byers, B. F.....	Bicknell	2373
Byers, H. L.....	Morgantown	2075
Byler, Christian	Marion	360
Bynum, Frank P.....	Lebanon	2898
Byrum, Geo. B.....	Laconia	3404
Bly, P. M.....	Farmland	2507
Bly, Frank J.....	Economy	2505
Cade, John	Covington	2653
Cade, John W.....	Indianapolis	5400
Cain, Frank G.....	Connersville	1305
Cain, Taylor R.....	Indianapolis	1630
Callahan, Charles F.....	New Albany	1705
Callaway, George E.....	Cambridge City	2104
Callaway, Charles H.....	Milton	202
Callender, Jesse Martin	Laporte	1930
Callow, Horace F.....	Decatur	1641
Caldwell, Clifford B.....	Terre Haute	5345
Caldwell, Ares M.....	Hartford City	1565
Calvert, Robert	Sullivan	3260
Cammack, Edmond	Milford	779
Camp, Chas. W.....	Garrett	1281
Campbell, Harry G.....	Indianapolis	1976
Campbell, James D.....	Waterloo	1025
Campbell, H. F.....	Bedford	1943
Campbell, Thomas	Clinton	761
Campbell, Francis W.....	Darlington	88
Campbell, Horace F.....	Frankfort	1981
Campbell, R. M.....	West Point	721
Campbell, Millard F.....	Lebanon	1570
Campbell, David Porter.....	Muncie	1005
Campbell, Benjamin N.....	Muncie	1004
Cameron, J. B.....	Michigan City	794
Cameron, Robert C.....	Fremont	1309
Canada, E. N.....	Winchester	2924
Canaday, Jonathan A.....	Parker	3900
Canfield, Richard W.....	Laporte	5268
Carithers, O. L.....	New Castle	3799
Carleton, J. M.....	Martinsville	1292
Carnine, Clinton D.....	Delaware	1425
Carnefix, Louis W.....	Indianapolis	5310
Carper, Mac.....	Winamac	122

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Carpenter, George Chester.....	Terre Haute	5217
Carpenter, Samuel W.....	Waveland	1947
Carpenter, Bertram A.....	Hagerstown	3506
Carr, Charles F.....	Wabash	716
Carr, Arthur B.....	Indianapolis	2967
Carson, Joseph E.....	West Lafayette	2036
Carter, James E.....	Huntington	607
Carter, Edward C.....	Fort Wayne	361
Carter, Frank Henry.....	Indianapolis	2916
Carter, John E.....	Terre Haute	1111
Carter, Calvin	Brookville	837
Carter, Albert H.....	Indianapolis	2913
Carter, Charles A.....	Indianapolis	1699
Carter, Frank	Liberty	3682
Carter, Horlen Wilson	Indianapolis	1857
Carter, Harlen Wilson Seawright.....	Indianapolis	5267
Carter, Emma	Indianapolis	1683
Carter, Frank	Liberty	3682
Carver, James M.....	Winchester	3646
Carver, Roscoe Athen.....	Lapel	5190
Casad, Frank	Monticello	1929
Case, George William.....	Indianapolis	5281
Caskey, Walter L.....	Indianapolis	3246
Cason, John O.....	Lebanon	3185
Cassaday, Burton	West Terre Haute	766
Cassell, Ed S.....	Anderson	3256
Cassell, J. M.....	Anderson	3255
Castetter, Clyde J.....	Goshen	3211
Chambers, Avery St. C.....	Indianapolis	54
Chambers, Oscar C.....	Indianapolis	55
Chamberlain, Dr. Wm. L.....	Poland	1445
Chandler, Harry R.....	Edinburg	3179
Chandler, Seneca Eugene.....	Hope	1461
Chapman, James P.....	Rome City	3383
Chastain, Frank	Mitchell	3676
Chavis, Charles	Indianapolis	3769
Clapesattle, G. A.....	Fort Wayne	3410
Clay, William H.....	Wakarusa	1182
Clark, Walter C.....	Wabash	3478
Clark, Harry A.....	Cannelton	5383
Clark, Rowland E.....	Wabash	2585
Clark, John C.....	Indianapolis	3229
Clary, L. E.....	Monrovia	3559
Clary, Ara G.....	Indianapolis	2785
Clawson, E. F.....	Clayton	1867
Crabb, Jervis A.....	Terre Haute	2262
Craig, John W.....	Berne	257
Craig, William F.....	Princeton	3512
Craig, A. B.....	Churubusco	2936

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Crane, James C.....	Clinton	2208
Crawford, Orin D.....	Indianapolis	1265
Crawford, Edward M.....	Indianapolis	1264
Cravens, Geo. E.....	Bloomfield	2021
Chenneour, H. C.....	Roanoke	2141
Chenneour, F. G.....	Roanoke	2142
Chipman, Edward R.....	Goshen	3231
Chrzanowski, B. J.....	Whiting	5479
Cimmerman, George E.....	South Bend	1962
Clearwaters, E. C.....	Cloverdale	3803
Clem, Jacob B.....	Logansport	5040
Clements, James H.....	Williamsburg	3238
Cline, Joseph E.....	Silver Lake	1280
Clinsten, Harry W.....	Fort Wayne	1782
Cwiklinski, Vincent	Hammond	2778
Climer, Glasgo D.....	Goodland	3220
Creagh, William F.....	Indianapolis	5330
Crecelius, C. E.....	New Albany	2
Crider, Oliver E.....	Buck Creek	1314
Crigler, Thos. B.....	Lafayette	5278
Chinn, Thomas J.....	Indianapolis	2569
Chrisler, Stanley T.....	Bedford	3075
Criss, Riland	Lyons	1440
Criss, Charles B.....	Lyons	2809
Criswell, George W.....	La Fontaine	1687
Critz, Bert	Indianapolis	2997
Cochran, Alexander W.....	Indianapolis	1815
Coffey, Edgar	Terre Haute	967
Coggshall, Geo. R.....	Lynn	317
Cogswell, Walter	Elwood	233
Cohn, Valentine F.....	Frankfort	1979
Cohn, Bert W.....	Peru	8
Cole, W. D.....	Andrews	2168
Cole, James R.....	Indianapolis	2485
Coles, Albert	Warren	1423
Coleman, Will R.....	Crawfordsville	1524
Colins, William Z.....	Cicero	1083
Collins, Albert L.....	Valparaiso	3418
Collett, Fred D.....	Newport	216
Collom, George W.....	Mill Creek	3514
Colwell, William M.....	Elkhart	3826
Colvin, H. B.....	Flora	1432
Colvin, Mary E.....	Flora	1428
Compton, Frederick S.....	Terre Haute	555
Conant, Geo.....	Monrovia	3478
Conaway, Daniel	Cayuga	1853
Coney, Edward T.....	Indianapolis	2002
Confer, L. L.....	Indianapolis	453
Congdon, Loren A.....	Bristol	304

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Conklin, W. H.....	Westfield	214
Conn, Solomon, Jr.....	Winamac	915
Connell, John M.....	Monticello	2258
Conner, Willis B.....	New Castle	2460
Conner, Fred I.....	Columbus	5453
Conner, Ernest	New Albany	1137
Conner, Nellie	New Albany	1136
Connors, John W.....	Lafayette	5119
Converse, R. V.....	Indianapolis	1312
Conwell, L. V.....	Van Buren	1978
Conwell, N. Roy.....	Van Buren	5236
Cooke, John L.....	Goodland	230
Cook, Lyman B.....	Velpen	248
Cook, John V.....	Terre Haute	1527
Cook, Geo. D.....	Crawfordsville	182
Cook, George E.....	Anderson	791
Cook, Rosa	Mulberry	1906
Cook, Henry C.....	Mulberry	1907
Cook, Louie M.....	Terre Haute	3104
Coombs, Fred	Lebanon	2899
Coon, William H.....	Colfax	2648
Coonley, Charles	South Bend	512
Coons, William I.....	Indianapolis	3163
Cooper, Orla Franklin	Marion	2070
Cooper, Hugh M.....	Argos	671
Cooper, William Riley	Marshall	1946
Cooper, Stephen T.....	Lima	526
Cooper, Joseph M.....	Worthington	1080
Cooper, Isaac F.....	Worthington	1079
Cooper, P. A.....	Hammond	2385
Cooper, Ashley R.....	Mooresville	2009
Cooper, Fred G.....	Mooresville	2008
Cooperider, Elison	Kempton	3043
Coppes, Dallas E.....	Knightstown	5394
Cory, Jeremiah M.....	Kingman	1064
Cory, George W.....	Terre Haute	5449
Cory, Claude E.....	Kingman	1063
Cory, Gilbert L.....	Covington	1062
Corson, Joseph H.....	Evansville	1145
Corson, J. Albert	Monticello	2301
Conjell, Joseph M.....	Union Mills	618
Cost, John W.....	Young America	2191
Cottrell, John W.....	Indianapolis	3344
Cotton, Edgar B.....	Shelbyville	3359
Conden, Reynolds	Fort Wayne	5155
Coukey, John A.....	Indianapolis	2087
Coulson, John F.....	Logansport	70
Coulson, George	Thorntown	1786
Courtney, Anthony	Indianapolis	5396

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Cowon, Harry Arthur.....	Indianapolis	2914
Cox, William	Rosedale	2756
Cox, Oscar M.....	Marion	2583
Cox, David P.....	Terre Haute	1239
Cox, Richard A.....	Seymour	28
Cox, Ensley F.....	Amboy	634
Closson, Seymour M.....	Logansport	2132
Closson, Homer C.....	Logansport	2131
Cronin, Timothy J.....	Hartford City	2359
Crooks, Joseph	Brazil	3070
Crooks, J. W.....	Indianapolis	3715
Crooks, George B.....	Bridgeton	2612
Crosier, Frank	New Albany	3143
Crosier, Scott	New Albany	3051
Crouse, Justus H.....	Anderson	595
Cullom, Geo. C.....	Frankfort	3466
Cummings, Elizabeth R.....	Cannelton	417
Cummings, Eugene F.....	Cannelton	458
Cummins, Charles A.....	Clay City	3553
Cummins, Delbert E.....	Hymera	3306
Cummins, Wint	Hymera	3305
Cummins, William M.....	Hymera	3307
Cunningham, David F.....	Portland	1489
Cunningham, Walker M.....	Portland	1488
Cunningham, C. E.....	Derby	577
Cunningham, Arthur L.....	Bunker Hill	2235
Cunningham, Mills S.....	Michigan City	2236
Cunningham, Henry C.....	Cromwell	1376
Curran, Mary A. O.....	Bourbon	442
Curry, George A.....	West Terre Haute	767
Curry, C. Edwin.....	Chicago	5399
Curry, F. F.....	Richmond	1018
Currey, Alice A.....	Evansville	1249
Currey, Leon	Evansville	579
Curtner, William J.....	Carlisle	1070
Curtner, James F.....	Carlisle	1260
Cutler, Ernest L.....	Wolcottville	873
Cutshaw, Jessie May.....	Arcola	1711
Cutshaw, Geo. W.....	Arcola	1712
Cutshaw, G. W.....	South Bend	2176
Crumrine, Ira S. J.....	Landess	3880
Crawford, Chas.....	Ambia	3085
Dalton, George W.....	Coal City	2325
Dalton, Daniel C.....	Coal City	2324
Dando, George H.....	Orland	34
Danhour, J. W.....	Clay City	1068
Daniels, M. J.....	Sweetser	3088
Daniels, George E.....	Marion	3087
Daniels, Harley	Eaton	3585

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Danner, Rufus J.....	Elnora	1966
Danner, Joel F.....	Elnora	1965
Darby, A. Byron	Waterloo	2577
Darby, Hadsell Byron.....	Waterloo	2589
Darby, Frank W.....	Waterloo	2586
Dare, Hugh H.....	La Gro	270
Darland, Ralph E.....	Lafayette	5122
Darnel, C. A.....	Indianapolis	5083
Darnell, William J.....	Denver	399
Darraha, Walter H.....	Indianapolis	422
Darraha, Mattie L.....	Indianapolis	57
Darter, Lee W.....	W. Lafayette	5370
Daugherty, Chas. H.....	Anderson	559
Davis, W. H.....	Corydon	3455
Davis, George	Colfax	392
Davis, Leander T.....	Arlington	3812
Davis, Guy Foster	Lebanon	5032
Davis, Willis S.....	Washington	5003
Davis, Lambert	Lafayette	1557
Davis, Ellsworth D.....	North Vernon	1326
Davis, Andrew B.....	Hudson	2606
Davis, Stephen M.....	Waynetown	5439
Davidson, Ralph B.....	Petersburg	3456
Davisson, David J.....	Lafayette	352
Davenport, F. E.....	Auburn	1573
Davenport, Louis C.....	Bluffton	1278
Dawson, Charles	Mt. Vernon	1533
Dawson, Geo. V.....	Rochester	1405
Dawson, Elbert Eugene	Mt. Vernon	1532
Day, William F.....	New Albany	237
Deal, Willis Grant	Wyatt	622
Deam, Chas. C.....	Bluffton	292
Dearmin, E. F.....	Indianapolis	1887
Dearmin, W. T.....	Odon	1540
Deboer, William H.....	Pierceton	3242
Decher, C. J.....	Ligonier	3856
Deems, Warren Jay	Laud	1624
Dehority, Thomas L.....	Anderson	1569
Deitch, Otto A.....	Indianapolis	959
Deitch, Oscar S.....	Indianapolis	3668
Deitsch, F. C.....	Geneva	1027
Deitsch, Jacob W.....	Geneva	835
Deming, Adrian F.....	Indianapolis	1610
Dennis, Lewis	Salem	637
Dennis, Colonel E.....	Windfall	1833
Denison, George S.....	Hanna	1345
Denison, Jasper D.....	Terre Haute	1294
Denison, R. C.....	Vincennes	3168
Dent, Mattie A.....	Glenwood	2113

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Dent, William H.....	Glenwood	1466
Detzer, A. J.....	Fort Wayne	3014
Detzer, Martin	Fort Wayne	3130
Devol, Robert G.....	New Albany	1021
Deupree, Avery E.....	Edinburg	5179
De Caswell, L.....	Fremont	675
De Lay, William M.....	Bicknell	2165
De Loste, Joseph S.....	Madison	2000
De Priest, Homer C.....	Vincennes	5467
De Prez, William H.....	Shelbyville	2819
De Priest, A. B.....	Hazleton	2294
De Tar, David.....	Winslow	1446
De Vore, Wilmot E.....	Indianapolis	1101
Dibert, J. H.....	Garrett	946
Dibert, Walter S.....	Garrett	952
Dick, Jacob E.....	Crawfordsville	1616
Dickey, Edgar L.....	Lapel	3041
Dickson, Robert N.....	Jamestown	2016
Dickinson, William H.....	Richmond	5206
Diebold, Henry A.....	Fort Wayne	2339
Diehl, August	Lafayette	585
Dietrich, Albert H.....	Lawrenceburg	3639
Dietz, Fred T.....	Indianapolis	2488
Dils, John M.....	North Vernon	5433
Dillen, Erastus	Winslow	2850
Dittoe, Vincent A.....	Fort Wayne	2341
Diven, James R.....	North Anderson	1046
Dobbins, Frank G.....	Jeffersonville	2387
Dodd, George M.....	Bedford	774
Doddridge, William B.....	Mentone	1845
Dodge, William A.....	Indianapolis	2706
Doerr, John N.....	Indianapolis	2398
Doggett, J. L.....	North Vernon	629
Doherty, Martin F.....	Jeffersonville	1609
Doll, Elmer B.....	Greencastle	3124
Don, Fred D.....	Morocco	3916
Donaldson, Frank E.....	Chalmers	1905
Donaldson, John W.....	Indianapolis	3303
Donnell, Frank L.....	Greensburg	5166
Donnelly, Angelina Pratt	Terre Haute	891
Donnelly, Wm. M.....	Terre Haute	892
Donnelly, Le Roy	Terre Haute	3319
Donovan, Albert B.....	Williamsport	357
Dong, n, Isaac M.....	Selvin	3885
Doolittle, Benson	Jeffersonville	242
Doonell, E. R.....	Indianapolis	877
Dorner, Charles Theodore	Indianapolis	723
Dorsey, Charles B.....	New Albany	7
Doty, John W.....	Kokomo	2452

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Douglass, William E.....	Indianapolis	2538
Douthitt, Jas. W.....	Bedford	1945
Downs, Tevis C.....	Indianapolis	5416
Downing, Thomas P.....	Hobbs	187
Downing, Chas. S.....	Lafayette	1737
Drake, Fred T.....	Van Buren	2194
Drees, Bert A.....	Lafayette	2992
Dreier, William H.....	Fort Wayne	3655
Drew, Harry	Indianapolis	5142
Driscoll, Geo. T.....	Lafayette	36
Driscoll, Davis Christopher	Lowell	2962
Dryer, Romie P.....	Lagrange	2295
Duesterberg, Wm. G.....	Indianapolis	5315
Dugan, Thomas J.....	Indianapolis	2844
Dugan, John W.....	Elwood	5462
Duesterberg, Mary	Vincennes	2867
Dumbauld, John H.....	Huntington	294
Duncan, Walter C.....	Clay City	2203
Duncan, Harry H.....	Terre Haute	1353
Duncan, Frank G.....	Linton	2204
Dungan, James A.....	Danville	2646
Dunham, Daniel B.....	Indianapolis	2086
Dunham, Nellie B.....	Hammond	1382
Dunlap, Marshall H.....	Summit	3641
Dunlavy, John E.....	Greencastle	250
Dunn, Oliver Edmund	Spencer	2322
Dunn, Lemuel J.....	Spencer	2393
Dunnigan, Augustin J.....	Edwards	172
Dunnington, Carl C.....	Indianapolis	1689
Durand, James A.....	Lima	768
Durbin, Lloyd W.....	Indianapolis	218
Durham, James E.....	Muncie	2182
Durks, William E.....	Converse	5257
Dusch, Gabriel S.....	Tell City	1932
Dusch, Mary Louise	Tell City	1931
Dutchess, Owen A.....	Walton	3438
Dutchess, Chas. P.....	Walton	2797
Dutchess, Edith A.....	Walton	2798
Dye, Edw. E.....	Richmond	2377
Earle, Lennie N.....	Linton	3079
Early, Vincent L.....	Greenfield	450
Eastburn, David J.....	Indianapolis	2061
Eastman, C. W.....	Winchester	3580
Easterday, William Edwin	Terre Haute	45
Eatinger, Milo D.....	North Judson	2995
Ebert, George W.....	Indianapolis	5010
Ebershoff, Frederick H.....	Lafayette	2174
Eccles, Samuel B.....	Franklin	3732
Eden, James E. L.....	Powers	1922

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Edwards, Henry C.....	Muncie	492
Edwards, N. W.....	Fairmount	995
Edwards, Xen H.....	Fairmount	5407
Edwards, Henry S.....	Petersburg	3457
Egbert, Dr. James	Indianapolis	1203
Egbert, Tilla	Indianapolis	1202
Egbert, R. E.....	Marion	715
Ehle, Frank E.....	Bluffton	730
Ehrlich, Herman K.....	Laporte	1054
Eiler, Charles R.....	Flora	1934
Eikenberry, Mary	Churubusco	3915
Eitel, Charles A.....	Indianapolis	3278
Elberson, W. H.....	Bryant	3083
Elbrecht, Wm. A.....	Indianapolis	5069
Eldred, Sam'l T.....	Ligonier	137
Eldred, Frank R.....	Indianapolis	138
Eliel, Leo	South Bend	267
Elless, Harvey F.....	Delphi	924
Ellett, Joseph M.....	Rockville	183
Ellis, Geo. S.....	Terre Haute	1176
Elliott, John T.....	Asherville	1761
Elliott, Orlando	Connersville	1774
Elliott, J. R.....	Elwood	234
Elliott, C. E.....	Sheridan	3038
Elsby, Samuel J.....	English	583
Emanuel, Miss	Fort Wayne	3287
Emerson, William W.....	Converse	3765
Emerson, Orlean R.....	Brownstown	1323
Emmert, Mary A.....	Haubstadt	284
Emmert, John A.....	Haubstadt	283
Emshwiller, John	Montpelier	2071
Emshwiller, Daise Mae	Montpelier	5211
Emshwiller, Robert M.....	Montpelier	3363
Endly, Joseph B.....	Walkerton	2498
Engelking, Frank A.....	Indianapolis	3552
Engler, Owen	Walton	3779
Englehart, Theodore W.....	Brazil	1429
English, James D.....	Worthington	3788
Enlow, John W.....	Birdseye	2492
Enners, Edward H.....	Indianapolis	1598
Ensminger, Charles C.....	Shelbville	758
Epmeier, Wm. F.....	Evansville	2205
Epple, William F.....	Fort Wayne	366
Erb, Maynard M.....	Connersville	2317
Erdelmeyer, Frank W.....	Indianapolis	936
Erdelmeyer, Frank	Indianapolis	937
Erdmann, Edward E.....	Columbia City	5279
Erganbright, J. E.....	Indianapolis	5271
Ervin, Arthur B.....	North Webster	3680

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Estlick, Thomas I.....	Syracuse	2350
Eskew, John A.....	New Castle	3285
Ethell, Edward Fuller	Indianapolis	2739
Etter, Robert N.....	Lebanon	2900
Etter, Karl D.....	Indianapolis	5455
Evans, Mary C.....	Indianapolis	2953
Evans, Maroe	Indianapolis	3166
Evans, Thomas E.....	Greencastle	1949
Everode, Harry C.....	Muncie	5486
Ewing, W. J.....	Dillsboro	1469
Ewing, Emma	Dillsboro	1470
Eyster, Anna M.....	Indianapolis	1813
Fackler, V. Nevin	Lewisville	5181
Fall, C. W.....	Fowler	3798
Falk, Otto H.....	New Albany	5213
Falk, John S.....	Decatur	3365
Faris, Albert U.....	Bloomington	3674
Faris, Melville A.....	Bloomington	3673
Farrar, L. B.....	Indianapolis	1154
Fatout, Arthur	Indianapolis	933
Faucett, Richard D.....	Summitville	1970
Faulds, Kate Withrordam	Diamond	299
Fausler, Cassius W.....	Marion	996
Faust, Edwin	Terre Haute	1628
Fears, William L.....	Terre Haute	1075
Fehring, August H.....	Columbus	1477
Felder, Louis W.....	Fulton	1398
Fell, John	Greentown	624
Fell, Elizabeth	Greentown	625
Fell, Elmer B.....	Elkhart	822
Fendig, Simon	Wheatfield	201
Fendig, Louis	Rensselaer	2315
Fendig, B. F.....	Rensselaer	2314
Fennig, Lewis P.....	New Corydon	575
Feiger, Gus.....	Indianapolis	5033
Ferger, Edward	Indianapolis	3201
Ferger, Otto	Indianapolis	5103
Ferrell, J. G.....	Brazil	5008
Ferris, Elmer E.....	Connersville	1352
Fiebig, Louise	Boonville	1452
Fieser, Edward L.....	Rochester	5051
Fifer, George	Muncie	3247
Fihe, Leo H.....	Richmond	1509
Finehout, Edwin J.....	Elkhart	1520
Fink, Reuben	South Bend	1217
Fink, John J.....	Walkerton	2202
Fink, Emanuel A.....	South Bend	1218
Firsich, Balthaser	North Vernon	1690
Fischer, Henry	Kendallville	876

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Fish, Sylvanus M.....	Paris Crossing	1704
Fischer, Louis	Evansville	1221
Fisher, Samuel A.....	Indianapolis	2175
Fisher, Geo. C.....	Indianapolis	1658
Fisher, Samuel	Gas City	3892
Fitch, Charles William	Lawrenceburg	5341
Fitzgerald, Edwin H.....	New Albany	814
Fitzgerald, W. L.....	Rochester	984
Fithian, Mrs. C. E.....	Peru	3435
Flaughter, Fred H.....	Bloomington	102
Flavien, E. B.....	Peru	2309
Flavien, A. M.....	Peru	2318
Fleming, Nancy B.....	Princeton	3291
Fleming, Harry G.....	Indianapolis	1183
Fleshman, Lyman S.....	Mauckport	1762
Fletcher, Chas. W.....	Daleville	3000
Flick, A. W.....	Jasper	5167
Flood, J. O.....	Laporte	1341
Flora, Frank F.....	Huntington	2723
Flora, Albert A.....	Flora	2338
Floyd, Richard M.....	Shelbyville	129
Flynn, D. W.....	Mauckport	3192
Foellinger, Adolph	Fort Wayne	2344
Fogas, Wm. H.....	Mt. Vernon	850
Fogas, John T.....	Indianapolis	1044
Folkner, Isaac T.....	Kennard	3609
Ford, R. B.....	Stroh	1951
Ford, Edwin C.....	New Harmony	5089
Forgy, H. E.....	Decker	697
Forrey, Thomas J.....	Wawaka	1181
Forster, Harry	Terre Haute	326
Forster, Chas. F.....	Evansville	655
Forster, Maggie	Evansville	1575
Fosler, John	Richmond	5071
Foster, Thos. J.....	Ladoga	89
Fouche, Alonzo C.....	Knightstown	3138
Foulkes, Stephen Harvey	Terre Haute	1836
Fouts, Earl	Columbus	1767
Fouts, Orien E.....	Union City	1766
Fouts, John M.....	Centerville	5426
Fowler, Wm. R.....	Wabash	2365
Fox, Balser L.....	Indianapolis	3134
Fox, Charles M.....	Lafayette	5199
Fox, Joseph M.....	Lebanon	2912
Fraizer, A. J.....	Muncie	313
Francis, J. R.....	Indianapolis	2481
Franer, Herman E.....	Indianapolis	309
Franklin, Coral E.....	Bedford	515
Franklin, Fred	Belleville	1519

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Franz, Chas. H.....	Indianapolis	1814
Frazier, David P.....	Maxwell	1809
Frazier, Randsane	Maxwell	1810
Frazier, Albert	St. Bernice	6
Frech, Ernest Wilbur	Peru	5363
Frech, Albert	Huntington	3408
Freehafer, Harvey Elmer	South Bend	544
Freel, John L.....	Marion	783
Freeman, Frank W.....	Howell	3165
Freeman, James Francis	Howell	3165
Freese, Chas. F.....	Fort Wayne	2150
Freund, Wm. C.....	Indianapolis	5124
Friedmann, Chas. W.....	Fort Wayne	2256
Friedman, Martin	Jasper	52
Frietzsehe, Ernest F.....	Indianapolis	3057
Fritsch, Wm.....	Evansville	1829
Fritz, John T.....	Indianapolis	1157
Fry, F. J.....	Indianapolis	3143
Fryer, Frank H.....	Poneto	2608
Frysinger, And.....	Angola	2439
Fuelling, Louis F.....	Fort Wayne	643
Fueglister, Gustave L.....	Indianapolis	960
Fulghum, Chas. C.....	Fountain City	1808
Fulk, Louis P.....	Decatur	5372
Fullennider, Oscar L.....	Indianapolis	845
Fuller, Clarence M.....	Knox	2118
Fulling, Frank B.....	Boonville	2201
Fulk, Frederick L.....	Bloomington	5451
Fultz, William	Crothersville	3450
Funk, William E.....	New Amsterdam	3744
Funk, John A. J.....	Indianapolis	5300
Funk, John B.....	Liberty Center	542
Gable, Lewis A.....	Indianapolis	831
Gable, Howard F.....	Terre Haute	870
Gable, J. L.....	Marion	1604
Gackenheimer, Emanuel	Wabash	1593
Gaesser, Theo T.....	Troy	94
Galliher, Edward Moore	Muncie	2621
Gallup, Orrie E.....	Spencer	5401
Gampher, Frank S.....	Elkhart	295
Gante, Henry	Anderson	541
Gantz, Jacob S.....	Indianapolis	3819
Gantz, Daniel	Odon	2085
Gantz, Dr. R.....	Saline City	1499
Gantz, Willard C.....	Terre Haute	1498
Garber, J. B.....	Dunkirk	2420
Gardner, John G.....	Marion	5365
Gardner, William Franklin	Russellville	798
Garlets, Aden	Mongo	1112

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Garrett, Edward L.....	Larwill	1602
Garrettson, J. A.....	Indianapolis	2814
Garrison, E.....	Newport	3125
Garrity, John M.....	Indianapolis	883
Garrity, Robert E.....	Indianapolis	878
Garwood, John E.....	Fort Wayne	949
Gattman, Chas. V.....	Evansville	1186
Gauld, Gordon R.....	Crawfordsville	1607
Gauld, John D.....	Indianapolis	56
Gauck, John	Batesville	1698
Gautier, Conrad C.....	Greencastle	2011
Gauld, Alexander B.....	Indianapolis	1606
Gavlinghouse, Franklin P.....	Rockport	3345
Gavlinghouse, Aurelius D.....	Rockport	3346
Gay, James	Topeka	600
Gaylord, James E.....	Wabash	35
Geary, John K.....	Fort Wayne	3202
Gebauer, Emanuel H.....	Indianapolis	3228
Geddes, Geo. W.....	Butler	2765
Geltenbort, Frederick B.....	Laporte	1378
Geiger, W. S.....	Terre Haute	4
Geisler, P. H.....	New Albany	1287
Gentle, James M.....	Indianapolis	2626
Genolin, Charles	Nashville	5491
George, Harvey Monroe	Oolitic	5290
George, Jasper N.....	Oolitic	2637
George, Chas. B.....	Oolitic	3368
Gerard, Richard J..	Evansville	1178
Gerber, Alonzò L.....	Topeka	2386
Gerberding, R. E.....	Fort Wayne	3801
Gerhart, Frank H.....	Kokomo	5447
Gerke, Theodore	Evansville	863
Gest, Albion P.....	Cannelton	5095
Geyer, George U.....	La Fontaine	1771
Geyer, Edmund A.....	South Bend	5035
Ghent, Ira K.....	Frankfort	2998
Gibbs, Oliver H.....	Hamilton	3495
Gibson, George W.....	Houston	714
Gibson, John J.....	Madison	1915
Gifford, S. A.....	Laurel	2667
Gifford, John	Sheridan	1369
Gift, Luther R.....	Converse	474
Gilliatt, Wm. B.....	Youngs Creek	2083
Gillis, James C.....	Clinton	1534
Gillaspie, Chas. E.....	Staunton	3340
Gilmore, Albert	Pleasantville	3596
Gitre, Lyster W.....	Mishawaka	5226
Gwin, H. Wallace	New Albany	1286
Given, John P.....	Frankfort	1982

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Glenn, A. A.....	Noblesville	222
Glick, H. E.....	Lafayette	351
Goble, Joseph M.....	Mays	3174
Gobbel, Fred R.....	English	2404
Gocke, August C.....	Fort Wayne	2944
Godwin, Jesse	Alfordsville	3452
Golay, Lawrence W.....	Vevay	1802
Goldman, Royal F.....	Elkhart	684
Goldman, Frank J.....	Elkhart	683
Goldsmith, Sol.....	Indianapolis	5108
Goodale, Paul	Metz	1849
Goodale, B. B.....	Metz	1848
Goodale, Ford	Metz	1850
Gordon, B. S.....	Eagletown	2572
Gordon, Charles Francis	Pennville	5140
Gordon, Matthew H.....	Muncie	1047
Goss, Orle M.....	Warren	157
Gotsch, Otto Ernst	Columbus	5351
Gottschalk, Andrew	Berne	405
Graham, William U.....	Indianapolis	981
Graham, John A.....	Mishawaka	1209
Graham, Abner B.....	Mishawaka	1212
Graham, Geo. G.....	Veedersburg	153
Graham, Joseph L.....	Riley	3808
Graham, J. A.....	Jeffersonville	1480
Graham, Hugh T.....	Fairland	2111
Grahn, Gustav E.....	Indianapolis	953
Grahn, Edward G.....	Indianapolis	1306
Gram, Walter G.....	Fort Branch	5265
Granneman, H. C.....	Fort Wayne	1715
Graves, Mrs. Gilbert H.....	Indianapolis	2252
Graves, Gilbert H.....	Indianapolis	2253
Graves, E. M.....	New Ross	2993
Gray, Jno. F.....	Ireland	770
Gray, William	Indianapolis	3176
Gray, Jos. H.....	Dunkirk	2875
Green, Frank, Albert.....	Knox	86
Greene, Frank W.....	Syracuse	1150
Green, Morton D.....	Brownsburg	1252
Green, Hadley E.....	Indianapolis	1251
Green, Hiram A. L.....	Plainfield	693
Green, Fred W.....	Elwood	232
Green, E. E.....	Elwood	231
Green, Otis W.....	Indianapolis	2376
Green, J. W.....	Tailorsville	2405
Green, Lewis Edward	Connersville	1855
Green, Edward M.....	Columbus	2230
Greene, Lelia D.....	Syracuse	1151
Greer, J. Fenimore	Yorktown	5428

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Greer, Levi H.....	Yorktown	771
Gregg, Sarah L.....	Yorktown	3402
Gregg, Elijah H.....	Yorktown	3403
Gregor, Charles E.....	Tampico	5419
Gregory, William E.....	Marengo	3334
Gregory, Charles E.....	Sheridan	3913
Griffith, E. W.....	Cloverdale	3263
Griffith, J. W.....	Sullivan	2438
Grigsby, J. M.....	Logansport	2480
Grimes, Harvey L.....	Indianapolis	3857
Giezendanner, Harry F.....	Indianapolis	2288
Greiner, W. H.....	Vistula	945
Gross, William Otto	Fort Wayne	2151
Groves, Frank P.....	Milford	2668
Grooves, J. B.....	Newport	2493
Grover, Lizzie M.....	Frankfort	1977
Grubb, Bern B.....	Lafayette	2905
Guard, Charles E.....	Alexandria	1443
Gutelin, Wm. A.....	Bluffton	3338
Haag, L. C.....	Indianapolis	2691
Haag, Julius A.....	Indianapolis	2692
Haag, Louis E.....	Indianapolis	2693
Hackett, Edward R.....	Marion	2407
Hackett, Charles L.....	Roanoke	342
Hackett, John	Roanoke	341
Haddon, Jesse E.....	Dana	2190
Hadley, Ozro E.....	Amo	2416
Hadley, Clinton C.....	Anderson	2500
Hadley, Samuel M.....	Mooresville	3059
Hagenbuck, A. W.....	Fowler	470
Hagerty, Charles B.....	Scott	1380
Hagerty, Emmett B.....	Scott	1379
Hahn, Charles C.....	Indianapolis	1190
Haines, Samuel C.....	Clarks Hill	3726
Haines, Geo. W.....	Clarks Hill	3750
Haines, Frank A.....	Noblesville	3795
Haines, Calvin O.....	Danville	2218
Hale, Selden B.....	Fort Wayne	2696
Hall, Ernest Renan	Stilesville	1109
Hall, Minnie P.....	Indianapolis	3398
Hall, Frank A.....	Indianapolis	3397
Hall, J. F.....	Jamestown	1416
Hall, Guy C.....	Indianapolis	1637
Hall, Isaac L.....	West Lebanon	1639
Hall, Alva Curtis	Sidney	1847
Hall, Harry O.....	Shelbyville	3117
Haller, Dan H.....	Attica	532
Haller, Charles C.....	Attica	5381
Halliday, Eustace B.....	Acton	1257

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Halliday, William R.....	Lynn	1363
Halter, A. F.....	Garrett	1912
Halter, Mrs. A. F.....	Garrett	1911
Hamaker, M. W.....	Peru	661
Hamilton, Earl	Mt. Summit	2827
Hamilton, W. J.....	Linton	2057
Hammer, N. L.....	Indianapolis	3667
Hammer, Herman H.....	Indianapolis	3052
Hammersley, Clifford M.....	Clinton	5489
Hammond, Otto M.....	Frankfort	1980
Hampton, Rufus C.....	Indianapolis	1241
Hampton, Edward	Terre Haute	1564
Hanawatt, Valentine C.....	Logansport	1295
Hancock, George S.....	Campbellsburg	1732
Hancock, Ogle B.....	Worthington	5386
Hancock, Oscar L.....	Campbellsburg	1733
Handley, Willis D.....	Monon	2524
Handley, William L.....	Lowell	2196
Handley, Kate	Lowell	2195
Hanna, Charles U.....	Ladoga	5420
Harvey, Frank J.....	Markel	2282
Hannan, Junius H.....	Scotland	5459
Haney, Joseph Egbert	Peru	5031
Hauk, Erman N.....	Angola	5058
Hansen, Andrew M.....	Indianapolis	3605
Hansen, Zachary H.....	Columbus	2541
Harlbaugh, Horace Webb.....	Attica	3759
Harber, August A.....	Fort Wayne	1349
Hardenbrook, John	Ray	266
Harder, William C.....	Indianapolis	5346
Harding, L. C.....	Butler	2764
Hardman, Jesse Monroe	Huntington	5068
Hargan, James, Jr.....	Madison	3062
Hargitt, Ernest G.....	Indianapolis	2535
Hargrove, Raymond C.....	Rushville	2017
Harlan, Joseph	Dana	1776
Harper, Frank M.....	Madison	1917
Harris, J. S.....	Spencer	2619
Harrison, Charles A.....	Richmond	1351
Harrison, Allen C.....	Fishers Switch	3145
Harrod, Horace	Scottsburg	84
Harrold, Jesse S.....	Lewis P. O.....	3336
Harrold, J. C. N.....	Lewis	1377
Hart, F. E.....	Wolcott	1476
Hart, John G.....	Bicknell	2408
Harter, Joseph B.....	North Manchester	1346
Hartman, George W.....	Fort Wayne	5112
Hartzell, Wm. U.....	Hope	2588
Harvey, George W.....	Kendallville	784

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hastings, Delbert W.....	Milford	832
Hatfield, Charles M.....	Ridgeville	440
Hathaway, Henry C.....	St. Joe	2348
Hattery, Hiram D.....	Logansport	1253
Hatton, Roy D.....	Attica	2412
Haupt, Chas. A.....	Terre Haute	803
Havens, Walter	Rushville	1114
Hawks, Joe P.....	Goshen	2160
Hawks, Dwight H.....	Goshen	746
Hawkins, D. L.....	Anderson	103
Hawley, Linnie B. Summers.....	Union City	2041
Hawley, W. A.....	Union City	2040
Haworth, Isaiah	Atherton	3768
Hawthorne, John W.....	Indianapolis	219
Haydon, David N.....	Indianapolis	3911
Hayes, Gertrude C.....	Indianapolis	349
Haymond, Jos. A.....	Waldron	3384
Haynard, R. H.....	Rosedale	227
Haynes, E. M.....	Pittsboro	3648
Haynie, George W.....	Evansville	3308
Hayse, Edward J.....	Frankfort	3321
Haywood, Thomas Lowe	West Lafayette	5088
Hazelrigg, Mack M.....	Adams	2957
Hazelrigg, D. W.....	Adams	2956
Head, D. R.....	Princeton	3434
Healy, Harry H.....	Kentland	206
Hopping, John H.....	Indianapolis	2501
Heaston, Jacob H.....	Huntington	534
Heaton, Robert W.....	Scircleville	460
Heberhart, Hubert E.....	North Madison	1542
Heberhart, William G.....	Madison	2124
Hecht, David	Evansville	5170
Heck, Harry	Farmersburg	2926
Heckmann, Louis	New Harmony	333
Hedley, John W.....	Indianapolis	662
Hefferman, James	Indianapolis	702
Heider, Joseph L.....	Indianapolis	934
Heil, Frederic J., Jr.....	South Bend	548
Heims, I. N.....	Indianapolis	3184
Heineman, Albert F.....	Valparaiso	3110
Heiner, Edgar K.....	Hagerstown	1348
Heinrich, John R.....	Fort Wayne	3592
Heitkam, Charles O.....	Indianapolis	5134
Helm, Arthur C.....	Muncie	3019
Hemphill, Joseph P.....	Rising Sun	679
Henderson, Chas. A.....	Anderson	971
Henderson, Charles Edgar.....	Anderson	972
Hendricks, John E.....	Indianapolis	2963
Hendrick, J. B.....	Petersburg	3614

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Heuer, William P.....	Terre Haute	1411
Heupel, Frank C.....	Laporte	2877
Henry, Frank Mills.....	Greensburg	3018
Henricks, Thomas M.....	Greenfield	2468
Henthorne, George F.....	Whiting	3725
Herr, Simon	Brazil	3021
Herber, Conrad J.....	Terre Haute	2143
Hermann, F. W.....	Evansville	476
Hermansdorfer, August	Brookville	614
Hervey, Arthur	South Bend	5389
Hess, Elmer E.....	Brook	293
Heuer, Fred H.....	Decatur	1642
Heustis, Stephen H.....	Shelbyville	3325
Heyman, Edward A.....	Fort Wayne	1727
Hiatt, James A.....	Richmond	3487
Hiatt, Walter N.....	Indianapolis	5485
Hiatt, Thomas W.....	Indiana Harbor	3488
Hiatt, L. Maslick.....	Ridgeville	3343
Hice, Stewart	Diamond	965
Hickerson, W. H.....	Warren	158
Hicks, John E.....	Stilesville	2328
Hill, Sherman D.....	Sparksville	3898
Hill, W. E.....	Muncie	117
Hill, Julius	Garrett	785
Hill, Owen S.....	Carthage	1703
Hildebrand, W. M.....	Marion	1763
Hildebrandt, J. F.....	Attica	1984
Hildebrand, Edgar N.....	Columbia City	467
Hillman, William, Jr.....	Indianapolis	3727
Hilsmeyer, Frederick E.....	Velpen	3774
Hilt, David	Lafayette	3743
Hinchman, Leonidas Clay	Indianapolis	3183
Hindman, William T.....	Burlington	3695
Hinkle, Adam J.....	Goldsmith	448
Hinshaw, Elijah P.....	Headlee	2604
Hinshaw, Orlando D.....	Elwood	1706
Hipskind, Adam M.....	Logansport	3406
Hironimus, Otto.....	Mt. Vernon	5259
Hitch, Chauncey R.....	Lafayette	5060
Hite, John A.....	Clarksburg	1975
Hook, B. M.....	West Lafayette	2795
Hooseworth, Allen H.....	Elkhart	300
Hobbs, David C.....	Atlanta	2824
Hoch, F. L.....	Syracuse	3155
Hoch, Charles F.....	Indianapolis	3154
Hodson, Harry W.....	Martinsville	2394
Hoffman, Wm. F.....	North Liberty	563
Hoffman, John	North Liberty	564
Hoffman, George W. J.....	Terre Haute	1355

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hoffman, Edward O.....	North Liberty	1716
Hoffman, Peter	Linn Grove	368
Hoffman, George William.....	Logansport	2752
Hogan, Jno. T.....	Lafayette	2245
Hogan, Thos. W.....	Lafayette	1928
Hogan, W. J.....	Lafayette	5296
Hoham, Lotta W.....	Fort Wayne	1420
Hoham, F. D.....	Fort Wayne	1421
Holfelner, Albert John.....	Evansville	2072
Hollenbeck, Thomas W.....	Indianapolis	2448
Hollett, Claude B.....	Brownsburg	5481
Hollin, J. W.....	New Richmond	3189
Hollis, Thomas H.....	Worthington	3883
Hollis, Geo. H.....	Lafayette	5120
Hollowell, Orris J.....	Kokomo	2453
Hollowell, P. J.....	Birdseye	1795
Holmes, H. M.....	Columbus	2229
Holmes, Lewis W.....	Indianapolis	2240
Holmes, Wm. F.....	Indianapolis	2239
Holthouse, John B.....	Decatur	1643
Holtzman, Henry	Elwood	704
Hook, Hugh A.....	Muncie	5471
Hook, John A.....	Indianapolis	5020
Hoop, Philip E.....	Shelbyville	5461
Hoopengardner, Frank P.....	Ossian	2136
Hoover, Philip L.....	Carlisle	1501
Hoover, Nolan C.....	Carlisle	1500
Hoover, John W.....	Jeffersonville	752
Hoover, Elmer G.....	Carlisle	1502
Hoover, John H.....	Ossian	1885
Hoover, James A.....	New Albany	78
Hoover, Arthur K.....	New Albany	145
Hoover, Stanley S.....	New Albany	2672
Hopkins, Geo. W.....	Rensselaer	3324
Hopkins, Homer D.....	Indianapolis	1336
Hopkins, H. F.....	New Albany	1020
Hopper, Albert M.....	Lafayette	5125
Hoppes, William Oscar	Red Key	5192
Horn, Wilson E.....	Cloverdale	3241
Hornaday, John W.....	Mooreville	5143
Horner, Frank A.....	Brazil	2119
Horner, Otto K.....	Indianapolis	2122
Horner, Oscar L.....	Bloomington	896
Hornung, Carl G.....	Laporte	5355
Hoshour, Edward S.....	Indianapolis	452
Hoskins, Charles	Indianapolis	498
Hosman, Wilbert C.....	Akron	2275
Harshner, Barius L.....	Burkett	786
Hottel, Lynn S.....	Goshen	2694

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Houck, Abraham S.....	Shirley	2523
House, Andrew Dean.....	Cambridge City	1731
Houser, Leon R.....	New Corydon	1122
Houser, Amos	New Corydon	1121
Houseworth, Bert D.....	Elkhart	301
Houseworth, John E.....	Elkhart	302
Howard, Homer E.....	Summitville	169
Howard, Edward R.....	Summitville	170
Howe, Lawrence E.....	Bargersville	3666
Howes, Jarvis M.....	Bowling Green	1583
Hubbard, William	Anderson	3433
Hubbard, Frank M.....	Kokomo	909
Huder, Henry J.....	Indianapolis	1242
Hughel, Clarence	Indianapolis	2854
Hughbouns, Charles H.....	Austin	2768
Hull, W. H.....	Indianapolis	1726
Humston, Milton L.....	Goodland	1998
Humston, Chas. N.....	Goodland	1288
Humston, L. Claude	Goodland	2406
Humston, George G.....	Indianapolis	2603
Humphrey, C. A.....	Indianapolis	198
Hunemeier, Louis P.....	Washington	2099
Hunt, Judson J.....	Rensselaer	3209
Hunt, Frank L.....	Lowell	1163
Hunt, Ida T.....	Lowell	2974
Hunter, Abram F.....	Raub	494
Hunter, Harry C.....	Zanesville	2990
Hunter, Herbert C.....	Greensburg	5421
Hunter, Charles F.....	Raub	495
Hurst, Oscar W.....	Evansville	1754
Huntsinger, Abraham	Mishawaka	2851
Hurty, John N.....	Indianapolis	2482
Hussey, Harry	Cromwell	2351
Hussey, Martin L.....	Cromwell	2353
Hut, Clemens H.....	Evansville	989
Hut, Clemens T.....	Evansville	990
Hutchison, Theodore W.....	Sullivan	2308
Hutson, W. B.....	Fowler	1925
Hutzell, Joseph C.....	Fort Wayne	3086
Hitch, William E.....	Wheatland	2107
Hord, William A.....	Deputy	2571
Hitz, William Newton.....	Greenfield	5349
Ice, Harry H.....	Muncie	2889
Ikerd, John W.....	Switz City	2611
Iles, Wm. E.....	Russiaville	1289
Iles, Jeannot	Russiaville	3711
Illing, William A.....	Evansville	435
Illing, Ernest F.....	Evansville	434
Inco, Charles Edward.....	Evansville	861

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Innis, Robert E.....	Milroy	1303
Ireland, Homer A.....	Columbia City	194
Ireland, Emmett L.....	Mitchell	500
Ireland, T. H.....	Mexico	2478
Ireland, Alice O.....	Mexico	2477
Irvine, Fred D.....	Leesburg	2145
Irvine, Garrett W.....	Leesburg	2146
Irvine, Joseph A.....	Leesburg	3105
Irwin, M. W.....	Terre Haute	942
Irwin, G. W.....	Roachdale	744
Isterling, John P.....	Corydon Jet.....	1793
Izor, Benton H.....	Indianapolis	1399
Izor, Albert	Indianapolis	1400
Jackman, Charles F.....	Hamilton	1884
Jackson, H. Marsh.....	Muncie	2496
Jackson, John M.....	Monroeville	3261
Jackson, Chas. L.....	Indianapolis	3316
Jackson, Wallace L.....	Washington	968
Jalbert, Virgil	Terre Haute	5457
James, Elmer E.....	Portland	819
James, Harry C.....	Lafayette	1927
James, George B.....	Boswell	2643
Jamison, James C.....	Indianapolis	2144
Jaquith, Frank Edwin	Lawrenceburg	3889
Jay, Joe P.....	Kokomo	5404
Jeffers, H. H.....	Bloomington	3097
Jenkins, Benjamin	St. Paul	1010
Jenkins, Ed E.....	Shelbyville	111
Jenning, Guy G.....	Brookston	2616
Jenning, Pairesade	Brookston	2618
Jenning, Fred	Brookston	2617
Jennings, Thomas A.....	Moores Hill	914
Jenner, Henry N.....	Goshen	514
Jeter, Dr. Frank	Indianapolis	3448
Jett, Pierre T.....	Clay City	1893
Jett, Frank H.....	Terre Haute	1894
Johnson, John B.....	Sandford	982
Johnson, William P.....	Greenfield	5263
Johnson, W. W.....	Lafayette	1926
Johnson, Smith	Martinsville	1088
Johnson, Francis M.....	Winchester	1994
Johnson, Matthew A.....	East Chicago	5015
Johnson, Thomas J.....	Shoals	193
Johnson, Mrs. Elsie J.....	Shoals	3855
Johnson, William H.....	Indianapolis	3065
Johnson, Fred B.....	Rushville	1115
Johnson, Emil A.....	Terre Haute	1032
Johnson, Alfred P.....	Terre Haute	5272
Johnson, Christian W.....	Nappanee	691

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Johnson, Oliver H.....	Winchester	1993
Johnson, Arthur L.....	Farmland	2302
Johnson, John F.....	Fortville	2699
Johnson, John L.....	La Fontaine	721
Johnson, Frank M.....	New Richmond	572
Johnston, F. F.....	Indianapolis	3794
Johnston, Charles H.....	Cumberland	3739
Johnston, Walter W.....	Greensburg	5025
Johnston, William A.....	Cambridge City	1720
Jolly, Walter E.....	Bedford	5210
Jones, Clinton	Valparaiso	2330
Jones, Leonard S.....	Clayton	1839
Jones, John L.....	Fowlerton	1832
Jones, Frank C.....	Goodland	1293
Jones, Alfred B.....	Lebanon	551
Jones, Harry H.....	Lacrosse	720
Jones, C. A.....	Indianapolis	3910
Jones, Edgar L.....	Indianapolis	5417
Jones, Jay	Medaryville	1538
Jones, J. N.....	Washington	2853
Jones, Daniel Milford	Lebanon	5126
Jones, William W.....	Greencastle	386
Jones, Fernando C.....	Alexandria	750
Jones, Eldan F.....	Fowler	859
Jones, Geo. W.....	Fowler	858
Jones, Freeman L.....	Bryant	3081
Jordan, Francis Dudlev.....	Indianapolis	2451
Jordan, William Henry.....	Indianapolis	2449
Jordan, Orion B.....	Etna Green	1093
Joseph, William	Advance	1208
Joyner, C. E.....	Terre Haute	2671
Juday, Maurice W.....	Indianapolis	2831
Judy, Chas. B.....	Hammond	635
Julian, Geo. W.....	Wilkinson	3491
Kadel, Edward Adam	Terre Haute	2431
Kadel, Otto N.....	Terre Haute	5157
Kaiser, Wm. C.....	Fort Wayne	2717
Kannapell, Frank N.....	New Albany	828
Kappel, John H.....	Fort Wayne	2274
Kappler, John G., Jr.....	Evansville	2039
Kardes, Joseph A.....	Indianapolis	5137
Karns, Lewis J.....	Bluffton	588
Kassulke, August	Indianapolis	5276
Kauffman, Henry E.....	Terre Haute	1372
Kauzler, John F. W.....	Indianapolis	3859
Kaylor, Milo	Huntington	911
Klaer, Joseph J.....	South Bend	955
Knapp, Warren Melvin.....	Flora	2337
Kramer, Jesse W.....	Bluffton	1057
Kramer, Louis A.....	Fort Wayne	3286

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Krawer, Leonard G.....	Michigan City	2090
Kratzer, Eugene F.....	Peru	2234
Kratz, Henry E.....	Angola	979
Kratz, John E.....	Angola	978
Keasbey, Thomas W.....	Dunkirk	2298
Keating, James W.....	North Salem	395
Keefer, Elisha	Mongo	2949
Keefer, Edward J.....	North Manchester	2883
Keegan, Frank	Indianapolis	3146
Keenan, B. A.....	Indianapolis	1677
Keene, Bernard M.....	Indianapolis	1433
Keene, Jerome J.....	Indianapolis	2911
Keesling, Benjamin F.....	Logansport	412
Keiser, F. R.....	Indianapolis	3493
Keith, G. P.....	Rochester	2965
Kellar, Charles F.....	Brazil	5474
Keller, Conrad	Indianapolis	948
Keller, John C.....	Louisville	82
Keller, Andrew J.....	Fort Wayne	681
Kelly, Arthur P.....	Tocsin	3772
Kelly, Scott	Alexandria	5343
Kelly, Chalmers F.....	Tocsin	3778
Kellogg, John W.....	Knox	672
Kelsey, William E.....	Monterey	711
Kemp, G. W.....	Russiaville	3156
Kemper, G. R.....	Osgood	2930
Kempf, M. W.....	Evansville	1267
Kendall, Samuel B.....	Losantville	506
Keenly, Albert V.....	Lafayette	5084
Kennon, Orla E.....	Winchester	3644
Kennedy, Mary	Lawrenceburg	5252
Kennedy, Stephen A.....	Stockwell	1745
Kennedy, Adam W.....	Dunkirk	1022
Kensink, William B.....	Terre Haute	5384
Kepert, Andrew Edward.....	Hammond	5327
Kerch, Wm. S.....	Indianapolis	1359
Kerlin, Leroy B.....	Huntington	5128
Kern, Rudolph	West Harrison	3877
Kern, Walter H.....	Indianapolis	2533
Kersey, Stephen G.....	Darlington	87
Kerth, Alexander H.....	Evansville	1419
Kessinger, W. Scott.....	Elizabeth	2560
Kettering, W. Clayton.....	Auburn	177
Klider, George M.....	Marion	833
Kluth, Adolph F.....	Lafayette	508
Kneale, John H.....	Brookston	2593
Kneale, Henry	Brookston	3597
Knox, Rufus B.....	Lafayette	5391
Kreidler, Louis C.....	South Bend	613

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Kretsch, Cas	Indianapolis	2074
Kiefer, Thomas F.....	Petersburg	5312
Kightly, Chas.....	Oakland City	1880
Kibbe, Edward	Elkhart	708
Kimbrough, James M.....	Logansport	5266
Kincaid, George P.....	Jeffersonville	243
Kincaid, Duncan E.....	Jeffersonville	244
King, Daniel B.....	Elwood	1184
King, Henry M.....	Indianapolis	1997
King, L. B.....	Indianapolis	882
King, Abram Hendricks	Indianapolis	2336
King, D. S.....	Redkey	1828
King, Harriet	Indianapolis	2634
King, J. Dillon	Terre Haute	160
Klinkenberg, Paul G.....	Kendallville	1491
Kinney, Joseph E.....	Logansport	64
Kinsey, Lewis E.....	New Castle	2054
Kirk, Philander M.....	New Castle	2055
Kirk, A. E.....	Rensselaer	3593
Kirk, A. L.....	Rensselaer	3594
Kissling, Frederick H.....	Elwood	1365
Kistler, Carl G.....	Royal Centre	2130
Kizer, Harry B.....	Winchester	3432
Knight, Roscoe C.....	Coatesville	447
Knight, Herbert	Kendallville	1023
Klinsick, William	Logansport	1401
Klingensmith, I. L.....	Indianapolis	1523
Knickerbocker, Clarence	Elkhart	627
Kretenstein, George W.....	Terre Haute	2684
Krietenstein, Carl	Terre Haute	2676
Krietenstein, Will L.....	Terre Haute	2685
Krinbill, Oscar A.....	Hammond	2357
Koehn, August Wm.....	Fort Wayne	1913
Kohl, Grover Chalmer.....	Terre Haute	5235
Kohr, Thomas William.....	Hammond	3623
Kohr, Rebecca	Hammond	3624
Kolb, Michael	Hammond	1087
Kolupa, Ladislaus A.....	South Bend	5333
Koontz, Charles E.....	Bremen	2445
Koontz, Frank J.....	Bremen	2447
Koshland, Herbert I.....	South Bend	168
Kostanzer, Raymond E.....	Crawfordsville	1311
Klaer, Otto J.....	South Bend	954
Kluze, Wm. H.....	Indianapolis	3661
Kloepfer, Otto A.....	Michigan City	1035
Kloth, Rudolph D.....	Indianapolis	2635
Knamlein, Harry W.....	Indianapolis	5480
Knodel, Ernest F., Jr.....	Indianapolis	3273
Knoefel, Chas. D.....	New Albany	25

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Knoefel, Bruno	New Albany	1
Knoefel, August F.	New Albany	610
Knox, Samuel R.	Paoli	3225
Kuss, Ralph H.	South Bend	601
Kiisel, Fred A.	South Bend	209
Kute, James H.	Elwood	1647
Kutz, Samuel L.	Kirklin	123
Kutz, George M., Jr.	Kirklin	124
Krueger, Lewis Edward.	Indianapolis	609
Krauss, William R.	Hartford City	2662
Lacke, Edward H.	Newburgh	2656
Ladd, James W.	Dale	2919
Ladd, Mary Belle	Dale	2918
Ladd, Ralph Brinton	Oxford	5297
Laird, A. A.	Frankfort	2973
Lamm, Leander D.	Converse	473
Lamb, Henry C.	Bloomington	2701
Lambert, Chas. W.	Indianapolis	648
Lamberson, Frank O.	Indianapolis	2592
Lambert, J. P.	Evansville	2214
Lambert, James E.	Indianapolis	3244
Lambert, Charles I.	Indianapolis	5472
Lammers, Edward S.	Terre Haute	149
Lance, John T.	Princeton	2872
Lane, John H.	Charlotttsville	273
Lane, Chas. J. F.	Indianapolis	1614
Lane, Nathan J.	Campbellsburg	2542
Lang, Julius W.	Kendallville	525
Lantz, J. J.	Warsaw	3781
Larr, David W., Jr.	Otterbein	3577
Larkin, William J.	Swayzee	1123
Laube, Julius P.	Indianapolis	1098
Laughner, Bert	Whitestown	2397
Laughner, A. M.	Whitestown	2396
Lautenschlager, Christian P.	Patrickburg	2948
Lautzenheiser, David D.	North Manchester	570
Lavol, Edw. J.	Evansville	1247
Laval, Henry	Evansville	651
Laval, William	Evansville	650
Lawshe, Charles H.	Swayzee	5475
Lawson, John E.	Corydon	1324
Lay, Francis T.	Columbus	5001
Lay, Chas. F.	Indianapolis	647
Layman, William	Auburn	763
Layton, Ed.	Linden	986
Leadbetter, Frank S.	Connersville	1511
Leach, M. V.	Indianapolis	3502
Leach, Percy	Kokomo	1872
Leavitt, H. B.	Worthington	3257

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Leadman, William E.....	Lizton	2520
Lee, James C.....	Anderson	2013
Leedy, A. W.....	Marion	1238
Leedom, Henry F.....	Morocco	3909
Leek, James C.....	Fontanet	2677
Leek, C. C.....	Terre Haute	2682
Leeson, Fred W.....	Indianapolis	3463
Leeson, Howard E.....	Elwood	5361
Lehr, William	Bremen	2423
Lehrritter, Martin J.....	Indianapolis	424
Lehrritter, Hugo H.....	Indianapolis	425
Leibecke, Charles	Aurora	383
Leist, Jacob L.....	Indianapolis	3034
Leland, John E.....	Plymouth	2939
Lemasters, Chester H.....	Anderson	2495
Leonard, Charles H.....	Elkhart	148
Leuark, Ovid B.....	Oxford	2654
Lender, Janet	Whiting	275
Lender, Gustav	Whiting	274
Lenney, Julie R. S.....	Crown Point	3131
Lepper, Anna C.....	Fort Wayne	3538
Lepper, Charles O.....	Fort Wayne	3536
Letherman, W. C.....	Valparaiso	3293
Lewis, E. L.....	Albany	147
Lewis, George B.....	Dupont	3912
Lewis, Fred J.....	Princeton	556
Lewis, Walter H.....	Pendleton	1065
Lewis, Horace F.....	Pendleton	1066
Liberata, Sister M.....	Lafayette	5150
Lichtenberger, Frank	Indianapolis	1043
Lienkaemper, Otto	West Lafayette	775
Light, Hugh M.....	Freedom	2518
Lindley, Walter C.....	Indianapolis	3526
Lindley, James H.....	West Baden	518
Lindeman, Henry J.....	Washington	2852
Lindeman, Fred H.....	Fort Wayne	2607
Lindemann, Emil W.....	Michigan City	358
Linegar, John M.....	Fairfield	1584
Lindgren, George A.....	Indianapolis	1746
Lindsay, James C.....	Tipton	465
Lindsay, Wm. Sherman	Sharpsville	3454
Lingle, S. L.....	Paoli	1038
Lisman, J. W.....	New Lebanon	1724
List, Samuel W.....	Franklin	2544
Little, B. F.....	Quincy	3718
Livingston, John J.....	Freeman	3573
Lockhart, T. L.....	Owensville	5224
Lockwood, Jasper	Laurel	3678
Loertz, A. F.....	Indianapolis	2755

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Loesch, Geo. H.....	Fort Wayne	842
Lohman, Dietrich H.....	Lafayette	1890
Lollar, Enos	Saratoga	1961
Lommel, Arthur F.....	Lawrenceburg	5247
Long, Milton C.....	Lebanon	854
Long, Jacob Albert.....	Bluffton	1277
Long, Leonard H.....	South Bend	5195
Long, Abram F.....	Rensselaer	1051
Long, Noah W.....	Portland	5230
Longstreet, E. H.....	Warsaw	1881
Loomis, John C.....	Jeffersonville	12
Loomis, Herbert	Jeffersonville	13
Loop, Z. U.....	Galveston	269
Lorenz, John W.....	Evansville	654
Lorenz, Sophia A.....	Evansville	653
Lorton, John N.....	Spurgeon	3188
Larsh, Joseph A.....	Rensselaer	3322
Lovett, Justin	Huntington	912
Loury, Franklin E.....	Granger	3420
Luckey, Thomas A.....	Wolf Lake	1660
Luke, Eugene D.....	Elkhart	5187
Lukens, Bert C.....	South Bend	3055
Luken, John H.....	Richmond	2553
Luken, Augustus G.....	Richmond	2189
Lynch, Martin	Edinburg	2897
Lynch, Michael P.....	Indianapolis	3847
Lynn, Winfield S.....	Indianapolis	1553
Lynn, Charles E.....	New Castle	2212
Lytle, Thomas W.....	Rushville	2784
Lytle, John H.....	Indianapolis	2712
La Master, George Washington.....	Fort Wayne	3416
Le Fevre, Jay M.....	Garrett	3829
Le Saulnier, Walter Jean.....	Indianapolis	5016
Lacy, J. J.....	Jasonville	3621
Largent, Benjamin P.....	Muncie	3869
McAllister, Howard	Indianapolis	5325
McCain, Richard C.....	Kentland	2832
McCammon, Bert C.....	Indianapolis	5285
McCarter, Melvin J.....	Macy	1153
McCarty, Otto C.....	Carthage	5207
McCauley, S. G.....	Elkhart	823
McClain, Marion A.....	Carthage	3628
McClain, William H., Jr.....	Indianapolis	43
McClain, William Lee.....	Scottsburg	5023
McClain, Charles E.....	Scottsburg	2098
McClaren, John E.....	New Albany	142
McClary, James D.....	Sandborn	2641
McClintock, Arthur C.....	Salem	5154
McClintock, Charles	Salem	3239

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
McClung, John Leigh.....	Rochester	1989
McClure, Harry L.....	Terre Haute	5293
McCollum, John W.....	Bippus	1013
McCollough, Wm. B.....	Franklin	2444
McConnahey, Alton E.....	Morocco	3023
McCoy, William J.....	French Lick	1362
McCord, Howard B.....	Auburn	176
McCullough, William F.....	Westport	2433
McCullough, Frank V.....	Scottsburg	5409
McCullough, William Theodore.....	Dillsboro	3638
McDermott, J. P.....	Corydon	3407
McDill, Bert L.....	Indianapolis	261
McDonald, Jeff.....	Crawfordsville	1941
McDonald, Lemuel A.....	Indianapolis	1456
McDonald, John M.....	Indianapolis	590
McDonald, David H.....	Quincy	918
McDonald, Alonzo D.....	Angola	1164
McDonald, J. H. H.....	New Albany	5172
McDonnell, Frank C.....	Richmond	678
McDonnell, Thomas F.....	Richmond	677
McDonough, Courtney B.....	Marion	5264
McDougal, William E.....	Muncie	2744
McFeren, Joseph	Independence	2390
McFeren, Arnet	Independence	2391
McGhee, Wm.....	Anderson	3870
McGregar, Geo. H.....	Somerville	1011
McIlvain, W. H.....	Bainbridge	3399
McIntosh, N. G.....	Midland	3755
McInturf, James Franklin	Hemlock	3879
McJohnston, Willard E.....	Terre Haute	5000
Mc Kay, John C.....	Indianapolis	2892
McKeehen, William N.....	Fremont	369
McKenna, Roy C.....	Connersville	5028
McKenna, Samuel O.....	Connersville	1623
McKinley, John Edw.....	Shelburn	3091
McKnight, Noble C.....	Columbus	5429
McKown, Walter C.....	Frankfort	5205
McLain, Preston	Greencastle	2475
McLeay, J. F.....	Indianapolis	3258
McMichael, Robert W.....	Indianapolis	659
McMillin, Augustus C.....	New Richmond	1472
McMillan, James P.....	Medora	1041
McMillan, James Paul	Medora	5214
McMorris, C. C.....	Hall	1230
McNeill, William K.....	Perrysville	1790
McNutt, Wm. Y.....	Indianapolis	2976
McOuat, Burford	Indianapolis	3860
McPherson, Wm.....	Kewanna	673
McPherson, James Thomas	Jonesboro	2539

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
McPherson, Chas. W.....	Wabash	5234
McPherson, Morton	Montgomery	3896
McPherson, S. L.....	Montgomery	3509
McRoberts, Alva A.....	Richmond	5127
McVey, W. H.....	De Gonia Springs.....	2297
McGunagill, Jared	Modoc	3137
Maas, Albert Garfield.....	Indianapolis	1599
Mace, Lawson N.....	Lexington	2564
Macy, Lambert	Greensboro	2640
Macy, Frank	Converse	1049
Maddox, Harry Rupert	Montpelier	5183
Maddox, Leander E.....	Montpelier	2137
Madison, Joseph S.....	Terre Haute	739
Magaw, Charles L.....	Richmond	576
Mager, George Edward.....	Garrett	5366
Mahaffey, James	Hartsville	3114
Mahin, Charles F.....	Kokomo	3203
Malsbury, A. A.....	Somerset	322
Malcolm, Jackson D.....	Indianapolis	5255
Malott, Enoch	North Grove	3142
Malsbury, Laughlin O.....	Peru	3734
Mangrum, Carl	Princeton	5445
Manion, John Jas.....	Indianapolis	2890
Manley, John E.....	Terre Haute	3066
Manuel, Frank	Westport	3737
Manuel, Asbury H.....	Merom	3736
Mannes, Wm. D.....	Ossian	5171
Manring, Wm.....	Greentown	1999
Manth, Albert W. F.....	Fort Wayne	3045
Maple, Charles O.....	Bloomington	1558
Marin, Pearl D.....	Hartford City	5463
Margowski, William S.....	Delphi	1483
Margowski, George L.....	Delphi	1482
Markle, William H.....	Rigdon	751
Markle, Sam'l E.....	Gaston	1568
Marshall, Hubert J.....	Aurora	1147
Marshall, Charles C.....	Aurora	1146
Marshall, Geo. A.....	Logansport	1900
Marsh, Orlando Shirley	Anderson	839
Marsh, Julius C.....	Danville	2551
Marsh, Harry G.....	Indianapolis	1710
Martin, R. E.....	Heltonville	382
Martin, Charles W.....	Lafayette	1586
Martin, Jesse	Paragon	706
Martin, Minnie M.....	Bourbon	331
Martin, Joel F.....	Bourbon	332
Martin, John F.....	Elkhart	3173
Mason, Samuel P.....	Winchester	2669
Mason, Fred A.....	Jeffersonville	5063

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Mason, Charles	Dugger	1992
Mason, Elmer E.	Marion	179
Massey, T. F.	Medaryville	509
Massey, H. F.	Medaryville	510
Mast, Uriah E.	Shipshewana	1195
Masters, Alva T.	Lebanon	1580
Matchette, A. C.	Bourbon	443
Matchette, Richard O.	Bourbon	695
Matotte, James C.	Westville	926
Mattern, Lemuel H.	Whiting	932
Matthew, O. R.	Mitchell	5448
Mattill, Louis	Indianapolis	454
Mattill, John	Indianapolis	947
Mauk, John Lewis	Indianapolis	5200
Mauch, Martin J.	Frankfort	484
May, Harry G.	Princeton	2574
May, Edwin W.	Petersburg	1587
Mayberry, John	Gas City	3521
Mayberry, Guy W.	Bicknell	3522
Mayer, Joseph A.	Terre Haute	1734
Mayes, E. G.	New Albany	24
Mayfield, R. Frank	Auburn	5245
Maxwell, George E.	Mooresville	416
Mead, James C.	Indianapolis	2081
Means, E. A.	Indianapolis	5055
Means, Cornelius B.	Shelbyville	2820
Means, Oscar A.	Logansport	1751
Means, Ora W.	Franklin	2134
Mears, L. M.	South Bend	5152
Meck, Henry J.	Kokomo	1874
Meck, G. E.	Kokomo	1877
Meck, Wm. T.	Kokomo	1876
Meek, Sylvester	Connersville	781
Meeks, J. R.	Winamac	287
Meek, Walter Harry	Evansville	225
Mehlig, Louis	Kokomo	2601
Mehlig, Henry	Tipton	2128
Mehlig, M.	Tipton	2129
Mehringer, Joseph A.	Jasper	53
Meier, John W.	Columbia City	565
Meinzen, Fred W.	Fort Wayne	1898
Meinzen, H. W.	Fort Wayne	1897
Meiser, J. W.	Monticello	5460
Meissner, Frederick W.	Laporte	621
Meissner, Edward L.	Whiting	3187
Meitzlu, Frank	Columbia City	133
Meloin, George M.	Indianapolis	3084
Mendenhall, William W.	Westfield	2686
Mendenhall, Ira A.	Mecca	289

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Mendenhall, W. E.....	Indianapolis	3135
Mendenhall, Olin H.....	Cicero	2429
Mendenhall, Lucius L.....	Indianapolis	2177
Mendenhall, Charles W.....	Indianapolis	2674
Mendenhall, Noah M.....	Brazil	3401
Mendenhall, John C.....	Evansville	799
Menefee, Reuben Ashford.....	Summitville	3233
Menefee, Will D.....	Ambia	3852
Menefee, George	Ambia	3851
Mennett, Overton H.....	Columbus	2455
Menough, James Howard.....	Brazil	2120
Mergell, George E.....	New Albany	75
Merrill, Edward S.....	Indianapolis	879
Merrill, William J.....	Indianapolis	1709
Merritt, E. B.....	Frankfort	1728
Mertz, William	Fort Wayne	1748
Mertz, Edward L.....	Fort Wayne	1747
Matheny, J. M.....	New Waverly	1424
Metzler, S. N.....	Indianapolis	663
Metzler, Arthur C.....	Indianapolis	664
Meyer, George F.....	Seymour	2537
Meyer, Le Roy Everett	South Bend	5379
Meyer, Christian	Lanesville	15
Meyer, Frank B.....	Rennselaer	3236
Meyer, Monroe M.....	South Bend	126
Meyers, Kirby Clinton	Brookville	2059
Michael, Jno. B.....	Fort Wayne	3828
Michaelin, Daniel F.....	Fort Wayne	5220
Middleton, Leonard William	Terre Haute	5369
Milburn, Felix O.....	Patoka	2813
Milburn, Herbert Author	Patoka	5318
Milford, James Edward	Indianapolis	3157
Milhous, C. W.....	Seymour	1574
Milligan, S. R.....	Clarks Hill	3741
Millikan, Mont V.....	Indianapolis	2978
Millikin, Isaac B.....	Garrett	951
Miller, Dr. D. H.....	Franklin	2135
Miller, Andrew S.....	Middletown	977
Miller, Jno. M.....	English	2816
Miller, Frank E.....	New Albany	415
Miller, Frank P.....	Middletown	976
Miller, William C.....	Indianapolis	3446
Miller, Benjamin E.....	Albion	1459
Miller, David E.....	Bringinghurst	3393
Miller, M. E.....	Michigantown	1779
Miller, Carl F.....	Peru	1921
Miller, John Henry	Vincennes	1390
Miller, Frank J.....	New Harmony	438
Miller, J. C.....	New Harmony	439

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Miller, William	Richland City	1831
Miller, Edward D.	Elkhart	3212
Miller, Reuben H.	Cross Plains	3903
Miller, James Herbert	Cross Plains	3766
Miller, Albert F.	Vincennes	5334
Miller, Charles S.	Vincennes	2296
Miller, Philip	Hammond	2769
Miller, G. T.	Fort Wayne	3550
Miller, Jason R.	Roachdale	3218
Miller, A. H., Jr.	Huntingburg	898
Miller, Elizabeth H.	Huntingburg	3458
Miller, Craig	Marion	1415
Miller, Joseph H.	Syracuse	2349
Miller, Charles Elliott	Albion	2209
Miller, Jesse A.	Centre Point	3339
Miller, Henry A.	Fort Wayne	2985
Miller, G. B.	Bluffton	1403
Miller, Frederick J.	Fort Wayne	3763
Miller, A. J.	Geneva	1740
Miller, Edward H.	Fort Wayne	5203
Miller, Frederick W.	Fort Wayne	5132
Miller, Nathan G.	Shirley	3684
Miller, George W.	Belleville	1158
Miller, Albert J.	Indianapolis	657
Miller, Corwin F.	Wolcottville	2557
Miller, Ida Belle	Wolcottville	2556
Miller, William B.	Marion	3235
Miller, Harry V.	Oxford	3167
Miller, Chester R.	Lawrenceburg	782
Miller, James M.	West Lebanon	2221
Miller, Elmer L.	Kokomo	2292
Miller, John R.	Indianapolis	3866
Milligan, J. W.	Clarks Hill	3742
Milliman, Harry	St. Joe	5053
Mills, T. P.	Zionsville	2977
Mills, Garland S.	Indianapolis	1563
Millsbaugh, Arthur B.	Mt. Vernon	5364
Milton, Robert P.	South Bend	639
Minnick, John W.	New Goshen	3566
Mitchell, Otto De Roy	Eaton	5160
Mitchell, Edgar D.	Bedford	1596
Mitchell, Charles L.	Noblesville	554
Mood, James	Tipton	196
Moody, O. W.	Coal City	2435
Moellering, William L.	Fort Wayne	2910
Moellering, Chas. B.	Fort Wayne	1784
Montgomery, Karl W.	Cynthiana	1395
Monroe, Harley R.	Valparaiso	5392
Moog, Wm. G.	Evansville	2807

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Mooney, Wm. J.....	Indianapolis	3729
Moor, Chester E.....	Orange	1555
Moore, Frederick A.....	Terre Haute	1389
Moore, Bernard V.....	Tipton	3425
Moore, Reuben G.....	Vincennes	1391
Moore, Azro F.....	Tipton	463
Moore, J. L.....	Mellott	2220
Moore, A. M.....	Tipton	462
Moore, Francis Otis	Alexandria	235
Morgan, David N.....	Crawfordsville	163
Morgan, Earl R.....	Anderson	5465
Morgan, John A.....	Kokomo	3161
Morgan, Harman K.....	Clinton	5487
Morgan, J. S.....	Austin	3886
Morgan, I. C.....	Austin	3891
Morgan, John M.....	Hebron	364
Morgan, Thurlow W.....	Bluffton	5307
Moran, Edward M.....	Michigan City	297
Mordhurst, H. W.....	Fort Wayne	1985
Morey, Wm. L.....	Clinton	760
Morlan, Elihu A.....	Francesville	1780
Moreland, Fred L.....	Medaryville	812
Moroney, D. M.....	Indianapolis	1896
Morris, Uriah S.....	Wabash	631
Morris, Thomas Earl	Atlanta	2825
Morrison, James H.....	Hartsville	2590
Morrison, Charles	Hartsville	2591
Morrison, James Madison	Fort Wayne	5284
Morrison, Geo. C.....	Indianapolis	1816
Morton, Daniel W. V.....	Knightsville	2383
Morchelle, Judson D.....	Indianapolis	2532
Moss, Joseph S.....	Greensburg	1097
Moss, William G.....	Spencer	1640
Mossman, Wade H.....	Marion	5458
Moser, Frank C.....	Anderson	1578
Mote, George R.....	Kokomo	5398
Moulton, F. A.....	Rockville	1258
Monninger, Albert D.....	Indianapolis	2846
Moutoux, Charles J.....	Indianapolis	1201
Montgomery, J. N.....	Brook	5175
Mowry, E. J.....	Bluffton	3709
Mowrer, James M.....	Indianapolis	3284
Mowrer, George F.....	New Castle	2490
Muehler, Otto H.....	Mt. Vernon	2980
Muehler, Emil E.....	Sullivan	321
Mueller, J. G.....	Indianapolis	1412
Mueller, Chas. G.....	Indianapolis	44
Mueller, Chas. A.....	Indianapolis	1243
Mueller, J. O.....	Evansville	433

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Mueller, Ferdinand A.....	Indianapolis	1486
Mueller, C. Robert	Evansville	852
Muench, Carl P.....	Indianapolis	104
Mugg, Dr. Henry M.....	Clarks Hill	3449
Muhl, Siegmar, Jr.....	Indianapolis	2153
Muhl, Siegmar F.....	Indianapolis	2156
Muller, Ben S.....	Evansville	335
Mullen, Thomas	Indianapolis	1170
Mullin, Bert A.....	Rushville	2015
Mullinix, Prementer	Greencastle	773
Munger, Joseph Arthur	Mitchell	51
Munson, Tullie J.....	Elkhart	840
Murbarger, Harry E.....	Indianapolis	3660
Murdock, Luther J.....	Greens Fork	611
Murdock, Francis M.....	Brooklyn	1134
Muriett, Jesse A.....	Crawfordsville	42
Murphy, Chas. F.....	Griffin	3078
Murphy, Mitchell M.....	Delphi	2254
Murphy, Roscoe E.....	Peru	5408
Murphy, J. H.....	Kempton	2613
Murphy, Walter D.....	Terre Haute	2303
Murray, Geo. W.....	Dublin	2159
Musselman, Frank D.....	Macy	1460
Mutschler, Emil	Evansville	1074
Mutz, John Roscoe	Edinburg	2895
Myers, Noah W.....	Crawfordsville	71
Myrick, Louis H.....	Indianapolis	749
Nacke, Anthony	Terre Haute	3749
Nachtrieb, William H.....	Decatur	641
Nail, Will S.....	Marshfield	1012
Nauer, W. M.....	Vernon	3436
Nash, L. Tom	Indianapolis	3610
Navin, Robert M.....	Indianapolis	2335
Navin, John N.....	Indianapolis	3477
Navin, Arthur J.....	Indianapolis	2736
Neaville, John F.....	Pittsboro	2705
Needham, Hugh J.....	New Albany	3351
Needham, Edgar A.....	New Albany	3352
Negele, Otto	Hammond	1526
Negus, O. W.....	Marion	3459
Nehf, Dena	Terre Haute	2023
Neill, Fred W.....	New Paris	5243
Neidlinger, Henry L.....	Brazil	3824
Nelson, George L.....	Muncie	482
Nelson, H. B.....	Bluffton	2932
Nelson, Carl E.....	Hammond	5282
Nelson, Chas. C.....	Ligonier	2983
Neukom, Albert	Terre Haute	2945
Neukom, William J.....	Terre Haute	902

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Neukom, Henry C.....	Terre Haute	3881
Neufer, John M.....	Fort Wayne	3556
Newby, Stephen M.....	Rochester	3738
Newland, William H.....	Valparaiso	3417
Newland, John Beach	Merom	5009
Newgent, O. C.....	Russellville	1806
Newton, Daniel M.....	Lena	58
Nickles, M. F.....	Sellersburg	5074
Nichols, Walter C.....	Muncie	2180
Nichols, Roy H.....	Danville	1654
Nichols, Oliver E.....	Danville	1653
Nichols, E. D.....	Danville	1655
Nicholson, A. C.....	Wheatland	2563
Nickel, Arthur E.....	Chesterton	5283
Niebergael, Chas. A.....	Fort Wayne	2171
Niedbalski, V. J.....	South Bend	356
Niemeyer, Harry F.....	Indianapolis	5344
Nierste, F. C.....	Westphalia	2028
Niles, George E.....	Chrisney	141
Niswonger, Henry	Fort Wayne	2506
Nixon, M. D.....	Indianapolis	3687
Nobes, Chas. E.....	Flora	928
Noblitt, T. J.....	Columbus	455
Noll, Benedict R.....	Fort Wayne	2464
Noll, Albert B. J.....	Fort Wayne	2465
Noll, Wm. H.....	Fort Wayne	2466
Nordyke, Robert	Wolcott	1475
Norman, J. R.....	Markleville	3805
Norman, George W.....	Indianapolis	1891
Norris, William C.....	Frankfort	817
Norris, George B.....	Frankfort	1034
Norris, O. R.....	South Whitley	3922
Norris, W. F.....	South Whitley	3811
Norton, Charles W.....	Indianapolis	3396
Norwood, Harry G.....	Lebanon	857
Nowlin, Clyde H.....	Crothersville	2929
Nungester, Harry A.....	Connersville	5437
Nusbaum, Payson L.....	Middlebury	2841
Nussbaum, Jos.....	Fort Wayne	3471
Nusbaum, Joseph F.....	Middlebury	2840
Nye, Marshall M.....	Crawfordsville	1759
O'Brien, Chas. T.....	Indianapolis	1007
O'Harrow, John W.....	Bloomington	3323
O'Mara, Patrick H.....	Fairmount	497
Ober, Joseph A.....	Washington	3672
Oburn, Samuel J.....	Indianapolis	2982
Ogle, John J.....	Fort Wayne	3476
Olcott, Otis W.....	Patriot	1667
Olcott, Charles W.....	Aurora	521

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Olcott, Ellsworth L.....	Indianapolis	1131
Oppelt, Otto	New Albany	1481
Orf, George	Indiana Harbor	263
Orr, Charles Wildey	Arcadia	688
Orr, Irving H.....	Delphi	210
Orr, L. M.....	Redkey	1899
Osborn, Verhn K.....	Plainfield	3374
Osborne, E. M.....	Indianapolis	1234
Osburn, Arthur A.....	Terre Haute	5227
Ostronski, Romnold	Hammond	2375
Ostronski, Leonard J.....	Hammond	5253
Otis, Amos R.....	Kendallville	1297
Ott, Dick H.....	Rockville	1124
Otto, Theo H.....	Columbus	1366
Otto, A. Blaine	National Military Home... ..	5274
Overman, C. H.....	Marion	186
Owens, Lot W.....	Boonville	1675
Owen, Alfred W.....	Greenwood	397
Owen, Wm.....	Castleton	3671
Owen, J. B.....	Castleton, R. R. No. 8....	3670
Owen, Samuel H.....	New Albany	2689
Owen, Luella S.....	New Albany	3266
Owens, Ollie	New Albany	1787
Pabst, Herman E.....	South Bend	795
Pannenberg, John C.....	Hammond	3789
Pantzer, John G.....	Indianapolis	2885
Papocynski, John W.....	South Bend	735
Parchu, Jessie	Anderson	5288
Parker, B. W.....	Columbus	2540
Parker, Dunham C.....	Argos	1590
Parker, Edward E.....	Culver	1591
Parkhurst, Layton M.....	Indianapolis	2307
Parkins, William L.....	Milton	81
Parish, William L.....	New Palestine	2082
Parish, Chas.....	Farmersburg	2979
Parks, Lyman	Jeffersonville	47
Parks, Floyd	Jeffersonville	48
Park, Laura C.....	Scottsburg	3204
Park, Frank H.....	Scottsburg	85
Parsons, Fred H.....	Terre Haute	5202
Parrett, Fred R.....	Princeton	1535
Pattison, William D.....	Winamac	120
Patton, J. W.....	English	3627
Patterson, A. R.....	Evansville	2516
Patterson, Clarence A.....	St. Joe	2354
Patterson, J. F.....	Loogootee	2285
Patterson, W. C.....	St. Joe	2355
Patterson, Wm. M.....	South Bend	1031
Patterson, John S.....	Garrett	1665

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Paul, Jno. R.....	Vincennes	3216
Paul, Charlie A.....	Vincennes	3217
Pauley, B. Frank	Marion	5354
Payne, Wm. H.....	Ashersville	2987
Payne, James W.....	Fowler	853
Pavey, Benjamin F.....	Lebanon	2138
Paxton, Isaac N.....	Mays	1313
Pfau, Wm. C.....	Jeffersonville	2094
Pfauer, Ernest	Indianapolis	2730
Plaster, Conrad	Banquo	3882
Platt, John F.....	New Albany	3299
Peacock, John C.....	Indianapolis	5319
Pearson, Julius D.....	Indianapolis	842
Peck, Frank L.....	Remington	468
Pellens, Theo	Indianapolis	3013
Pellens, A. J.....	Seymour	240
Pellens, Joseph B.....	Fort Wayne	2996
Pence, Wm. M.....	New Castle	2554
Pence, David D.....	Indianapolis	5332
Pence, Frank S.....	Kokomo	5228
Pence, Samuel R.....	Rossville	2766
Pennington, Logan	Indianapolis	5331
Pennington, James H.....	Greenfield	2243
Penrod, Thomas J.....	Bloomington	3429
Penninger, William H.....	Odon	2681
Pelz, Charles Theo.....	Evansville	652
Peoples, William	Freedom	2007
Perrin, Roscoe E.....	Connersville	5403
Perry, Thomas W.....	Jeffersonville	1582
Perry, Jno. E.....	Bippus	2031
Perkins, Joseph O.....	Greencastle	3792
Peter, W. F.....	Seymour	1663
Peters, William H.....	Madison	2940
Peters, Chas. N.....	Milan	886
Peters, Edward A.....	Indianapolis	499
Peters, David C.....	Laporte	985
Peters, Harry O.....	Indianapolis	2473
Peterson, Milton W.....	Hobart	1052
Peterson, Erman	Angola	5456
Petersheim, John F.....	Evansville	1220
Petersheim, F. M.....	Evansville	1219
Pew, Stanley W.....	Indianapolis	2062
Purcell, A. J.....	Freelandville	2399
Phelan, John	Indianapolis	1103
Pierce, John S.....	Red Key	1811
Pierce, Winfield S.....	Columbus	1276
Pierce, Francis E.....	Goodland	5251
Piercy, C. L.....	Indianapolis	3508
Pierle, Eugene A.....	New Albany	27

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Piper, Walter L.....	Denver	2848
Pilkenton, A. C.....	Greenfield	314
Pilkenton, Wm. A.....	McCordsville	2413
Pink, Julius	Indianapolis	1143
Pink, Louis	Indianapolis	1144
Pirnat, R. J.....	Evansville	3392
Pitcher, Peter M.....	Trafalgar	3530
Pickel, J. M.....	Midland	3756
Pickens, Winfield S.....	Indianapolis	2947
Pitman, Edward H.....	Rushville	2683
Parker, J. J.....	Merom	477
Phillips, E. L.....	Pine Village	1796
Phillippe, J. R.....	Indianapolis	5004
Phillips, Ernest H.....	Frankton	2069
Phillips, Chas. F.....	Butler	2080
Phillips, Lewis S.....	Judson	1430
Phillips, H. M.....	Auburn	762
Phillips, W. G.....	Frankton	3591
Philpott, H. H.....	Yeddo	1986
Pride, Gilbert B.....	Mishawaka	404
Poit, Henry W.....	Logansport	2614
Polster, Arwid	Fort Wayne	461
Pontius, George Allen	Columbia City	74
Porter, S. F.....	Peru	2788
Porter, Frank B.....	Parker	5478
Porter, Andrew R.....	Peru	2787
Porter, Timothy I.....	Peru	2789
Porter, William H.....	Logansport	2486
Porter, Charles Darwin.....	Geneva	1029
Porter, Charles H.....	Indianapolis	1462
Porter, Arch B.....	La Gro	271
Powell, A. M.....	Williamsport	2047
Powell, Arthur L.....	Montezuma	3251
Plogsterth, Louis W.....	Indianapolis	2152
Prevo, George D.....	Medaryville	811
Province, A. J.....	Mount Summit	3452
Provines, John A.....	Spencerville	2456
Provines, John A.....	Spencerville	5382
Proctor, Charles	Union City	1769
Proctor, J. A.....	Union City	1770
Puderbaugh, David A.....	Union City	2909
Pugh, Willard S.....	Greenfield	3539
Pugh, Jefferson	Kempton	3210
Purkey, Alonzo E.....	Morocco	2306
Purkey, Jesse R.....	Morocco	2305
Prutzman, Chas. O.....	Muncie	2623
Pye, Frederick P.....	Indianapolis	3599
Quigley, Michael C.....	Greenfield	496
Quigley, Edward F.....	Greenfield	772

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Quigley, James A.....	Richmond	1645
Quigley, Michael J.....	Richmond	1644
Raabe, Ernest	Terre Haute	1059
Raber, Oliver P.....	Kendallville	738
Raber, Ralph L.....	Kendallville	3200
Raffensperger, Hiram C.....	Indianapolis	2633
Raffensperger, Arthur C.....	Indianapolis	2632
Rager, Charles	Hamlet	2121
Ragsdale, F. M.....	Grand View	599
Rager, Harley P.....	Silver Lake	5242
Rains, General G.....	Cochran	1738
Rains, Rosa	Cochran	1739
Rains, Bert	Terre Haute	5273
Ralston, George W.....	Kewanna	674
Ralston, Sudie B.....	Evansville	3665
Ralston, Charles N.....	Evansville	3664
Ramler, Edward W.....	Richmond	2552
Ramsay, William R.....	Mulberry	1988
Randel, Harry Clay	Terre Haute	5159
Rarick, Dr. I. N.....	Powers	3854
Rathert, William H.....	Indianapolis	1649
Ratts, Thomas J.....	Rattsville	2255
Rattiff, Leonard M.....	Francesville	1408
Rastetter, Carl L.....	Fort Wayne	1601
Raus, H. L.....	Huntington	3465
Rawlings, Charles W.....	Milltown	2279
Ray, J. W.....	Emison	3838
Ray, Simon S.....	Fredericksburg	5097
Rayl, Alfred V.....	Carmel	3268
Rea, George A.....	Royal Centre	277
Recher, Lewis S.....	Morocco	3037
Rector, N. W.....	Ingalls	1521
Redinbo, Ellis	Medaryville	907
Redd, James M.....	Grammer	5286
Reeder, Granville A.....	Harlan	2139
Reed, Joseph S.....	Sullivan	2437
Reed, James E.....	Vincennes	895
Reed, Arthur C.....	Indianapolis	944
Reeves, N. W.....	Knightstown	2242
Reese, Geo. C.....	Evansville	1505
Reese, George B. M.....	Orestes	5385
Reed, Mrs. Lora B.....	Frankfort	391
Reed, William W.....	Winchester	3315
Reed, Chas. E.....	Winchester	5156
Reeve, Robert R.....	Edwardsport	525
Regedanz, Chas. F.....	Fort Wayne	533
Rebling, Charles F.....	Fort Wayne	365
Reid, Earl L.....	Attica	5138
Reid, J. O.....	Attica	1033

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Reick, Edw. C.....	Indianapolis	3370
Reinheimer, Ol.....	Winchester	3584
Reiss, George	Terre Haute	3914
Reisbeck, J. V.....	Indianapolis	5470
Rennoe, William O.....	South Bend	1493
Renahan, Osee Adolphus	Wawaka	1818
Renner, Maley E.....	Urbana	3557
Rensberger, Clarence S.....	Lakeville	2342
Rensberger, Lester E.....	Lakeville	2728
Renick, Henry Silas	Greencastle	3688
Reno, Chas. F.....	Indianapolis	2093
Renkert, Louis H.....	Indianapolis	589
Reynolds, Addison C.....	Williamsburg	3576
Reynolds, Charles G.....	Terre Haute	802
Reynolds, W. F.....	Indianapolis	1629
Reynolds, Charles	Plymouth	1100
Reyer, Emil	South Bend	793
Reynolds, Robert A.....	New Paris	5153
Reynolds, James M.....	Memphis	3232
Ribble, Amanda E.....	Indianapolis	2950
Ribble, Marquis D.....	Indianapolis	2187
Rice, Joseph M.....	Bloomington	2620
Rice, Louis M.....	Decatur	5193
Rice, Robert Roy	Lafayette	5061
Rice, Dr. L.....	Madison	272
Rice, Harry E.....	Indianapolis	3746
Rich, Albert J.....	Indianapolis	2092
Richey, Mrs. Laura J.....	Cambridge City	2065
Richards, R. H.....	Patrickburg	1206
Richardson, John F.....	Martinsville	1678
Richardson, Harry Gilbert	Liberty	1180
Richter, Wm. N.....	Rochester	1404
Riddle, Frank J.....	Terre Haute	669
Ridlen, Charles W.....	Indianapolis	5493
Ridge, Clayton H.....	Indianapolis	109
Riddell, James A.....	Aurora	259
Rieman, Louis C.....	Aurora	644
Rife, David L.....	Indianapolis	2056
Rigg, Chas. Franklin	Indianapolis	2773
Rigg, Sheridan	Princeton	1417
Rigdon, Frank H.....	Marion	66
Rigrish, D. W.....	Martinsville	493
Rigrish, Frederick Roy.....	Martinsville	5254
Riley, John P.....	Paoli	913
Riley, Harry H.....	Evansville	5129
Rinard, J. W.....	Plymouth	393
Rinewalt, Howard	Muncie	116
Ringwalt, Elza O.....	Fort Wayne	5034
Ritter, A. W.....	Topeka	1232

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Rivers, Chas. E.....	Bourbon	5373
Rhoads, H. B.....	Terre Haute	2761
Rhoads, Oscar S.....	Fort Wayne	1835
Roach, Patrick Anthony	Brazil	173
Roark, Charles Asbury	Milton	5141
Roberts, Alexander S.....	Alton	1026
Roberts, Harry	English	2123
Roberts, Edward J.....	Earl Park	1744
Roberts, Wm. C.....	Indianapolis	427
Roberts, A. A.....	Frankfort	1585
Robertson, Charles A.....	Salem	5423
Robertson, Reuben B.....	Salem	2510
Robinson, E. H.....	Terre Haute	5013
Robbins, Arthur	Grass Creek	2102
Robinson, A. B.....	Attica	1119
Robinson, Fred R.....	Attica	1120
Robinson, C. F.....	Attica	1118
Robinson, Sanford H.....	Connersville	3112
Robins, M.....	Newtown	1939
Robins, W. P.....	Newtown	1940
Roby, Oliver P.....	New Albany	3237
Rhodes, Eden A.....	Chrisney	285
Roch, Oscar Edward	Madison	3689
Rockenbach, E. C.....	New Albany	3
Rockefeller, Hester	Butlerville	2722
Rockefeller, Wm. H.....	Holton	2721
Rockwood, John H.....	Logansport	1758
Rockwood, B. O.....	Boswell	872
Rodenbeck, Charles A.....	Arcadia	5469
Rodman, James W.....	Fowler	469
Roe, Hallie J.....	Markle	5483
Roe, J. Newton	Valparaiso	3111
Roeder, Lawrence	Sandborn	1189
Roesch, Edward F.....	Indianapolis	5336
Roesener, Walter Charles H.....	Indianapolis	5197
Roesener, Frank A. H.....	Indianapolis	1777
Rogers, Stephen F.....	Greensburg	920
Rogers, Delos C.....	Elkhart	1679
Rohrig, George	Harmony	2331
Root, Claude	South Bend	5079
Root, William E.....	Elkhart	3253
Rose, Shan S.....	Indianapolis	5329
Rosenbaum, David	Mt. Vernon	1468
Rosenbaum, Herman	Mt. Vernon	1467
Rosenbush, John A.....	Union City	1650
Rosenbush, G. A.....	Union City	1651
Rosenthal, Simon	Tipton	408
Rosswurm, Fred	Summitville	3409
Ross, Samuel H.....	Shoals	312

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ross, William Allen	Washington	2869
Ross, Paul L.....	Richmond	1107
Rossbacher, A. John	South Bend	1296
Ross, Louis F.....	Richmond	1108
Ross, Frank E.....	Noblesville	1956
Rothinghouse, Charles H.....	Jonesboro	1517
Rothinghouse, A. B.....	Jonesboro	1518
Rothinghouse, Fred	Gas City	1515
Roush, Wilber Clark	Anderson	596
Rovenstine, Cassius A.....	Atwood	2250
Rowe, Laora M.....	Lagrange	2157
Rowe, George W.....	Indianapolis	3326
Ruch, Charles E.....	Indianapolis	1102
Ruch, S. W. M.....	Frankfort	5161
Rucker, Jesse S.....	Greenfield	5410
Rudder, Miss L. D.....	Salem	5163
Rudder, Wm.....	Salem	1437
Rudder, Wm. H.....	Salem	1436
Ruff, John M.....	Marion	2395
Ruggles, Frederic G.....	Warsaw	5301
Rule, George W.....	Goshen	1301
Ruly, Louis A.....	Corydon	1414
Runsie, Charles B.....	Fort Branch	1895
Runyan, Wildey J.....	Crawfordsville	3221
Rupe, Veazy Price	Indianapolis	1071
Rupp, William H.....	Shirley City	2029
Rush, Doctor B.....	Owensburg	2845
Rush, Leroy C.....	Indianapolis	5311
Russell, Oscar E.....	Huntington	2169
Rust, Thomas M.....	Anderson	3330
Rust, John A.....	Anderson	3329
Ryan, Larry C.....	Kokomo	1873
Ruh, Alexander	Rochester	1397
Ranke, Wm. F.....	Fort Wayne	2149
Sackett, Ozen	New Albany	3143
Sackett, Bruce C.....	New Albany	3149
Sacray, I. D.....	Monroe City	3793
Safford, Chas. M.....	Marion	2584
Sala, Albert F.....	Winchester	1095
Saladin, Lewis M.....	Indianapolis	5387
Sale, Edmund T.....	Terre Haute	2894
Salmon, Walter Leslie	Brownsburg	5280
Sanger, Handy	Veedersburg	152
Sandy, William P.....	Ellettsville	298
Sanford, Charlie P.....	Valeene	3862
Sanders, Reason D.....	Indianapolis	2133
Sanders, F. E.....	Perryville	1789
Sanborn, Albert H.....	South Bend	1014
Sargent, John A.....	Rockport	3858

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Saupert, E. T. E.....	Evansville	2012
Savage, Alex V.....	Crawfordsville	5059
Savage, John A.....	Oxford	1036
Savage, Louis P.....	Laporte	5270
Saxon, John	Marion	2411
Saylor, Dr. F. L.....	Elwood	131
Scanling, Frederick E.....	Indianapolis	5358
Schaaf, Otto Benjamin	Lafayette	5146
Schad, Chas. H.....	Indianapolis	3895
Schafer, Joseph F.....	Poseyville	5208
Schaefer, M. B.....	Huntington	2859
Schaller, Elmer	Indianapolis	790
Schannep, J. A.....	Hoagland	3468
Scharf, H. T.....	Hillsboro	1757
Scheddell, William Allen	Crown Point	2164
Scheddell, E. F.....	Hobart	2042
Scheele, Martin F.....	Fort Wayne	1959
Schell, Elmer P.....	Windfall	2167
Schellhase, F. W.....	Princeton	1708
Schermerhorn, Dr. J. C.....	Flora	566
Schiffer, Edward A.....	South Bend	546
Schiffer, Herman R. C.....	Mishawaka	511
Schilling, Nicholas	South Bend	736
Schillinger, George J.....	Indianapolis	2729
Schlaman, Herman L.....	Terre Haute	247
Schlaupfer, August J.....	Evansville	1504
Schlicker, Alex G.....	East Chicago	1983
Schmalzigaug, Gustave A.....	Indianapolis	308
Schmitt, Henry L.....	Peru	690
Schmidt, Louis	Spencer	699
Schmidt, Louis W.....	Fort Wayne	3762
Schmidt, Arthur F.....	Washington	5164
Schmidt, Edward H.....	Indianapolis	3537
Schmits, Gerhard H.....	Evansville	1453
Schnaible, E. M.....	Lafayette	2179
Schneider, John W.....	Logansport	2598
Schoenholtz, John J.....	Indianapolis	5067
Schoenfeld, August C.....	Terre Haute	5191
Schopp, Otto	Indianapolis	1319
Schreiber, Chas. Darwin	Tell City	5117
Schreiber, August	Tell City	792
Schroeder, Conrad	Shelbyville	759
Schroeder, Louis S. C.....	Fort Wayne	2425
Schubert, Harry M.....	Indianapolis	1273
Schubert, M. S.....	Indianapolis	1274
Schulmeyer, L. H.....	Indianapolis	2891
Schulmeyer, Carl W.....	Indianapolis	2277
Schulte, Walter H.....	Evansville	5209
Schultz, John J.....	Lafayette	59

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Schulz, Chas. G.....	Evansville	1250
Schultz, Ed B.....	Batesville	1188
Schultz, Lewis O.....	Brazil	1840
Schultz, Fred W.....	Brazil	1844
Schultz, William H.....	Fort Wayne	3890
Schwab, Milton G.....	Evansville	5104
Schwartz, C. W.....	Huntingburg	527
Schwartz, C. A.....	Indianapolis	1967
Schwartz, M. P.....	Indianapolis	1968
Schwaukhaus, Harry Arthur	Indianapolis	5186
Schwanniger, C. A.....	Jeffersonville	1581
Schwanniger, W. J.....	Jeffersonville	2851
Schwelker, Henry F.....	Fort Wayne	3785
Schwenk, George J.....	Seymour	29
Schwenzer, Carl Wm.....	Indianapolis	5238
Schwigler, Rudolph	West Lafayette	776
Scoles, E. Allen	Claypool	1764
Scott, W. H.....	Newbern	2379
Scott, Evan B.....	Linden	2508
Scott, James W.....	Kokomo	68
Scott, Charles A.....	Kokomo	171
Scott, Durant C.....	South Whitley	1130
Scott, Ameinks Pintes	Hartford City	5216
Scott, John E.....	Atlanta	2986
Scott, Clinton A.....	Oxford	3570
Scott, Wm. E.....	Mooney	2547
Scott, Albert E.....	Akron	2257
Scott, Emory L.....	Akron	813
Scott, W. W.....	Indianapolis	620
Scott, Walter Greely	Muncie	1076
Scott, Clinton L.....	Indianapolis	2004
Scott, J. M.....	Indianapolis	2078
Scott, Charles W.....	Indianapolis	1908
Scott, Ezra T.....	Westville	925
Scott, Lafe	Newberry	3518
Scudder, Jacob F.....	Edwardsport	522
Scull, William	Richmond	5139
Seal, Frank E.....	Mt. Carmel	65
Seal, Bernard	Loogootee	5431
Sears, Oscar W.....	Indianapolis	3663
Searle, Ernestus P.....	Anderson	2216
Searcy, Hiram	Kirklin	1603
Secord, Norval A.....	Indianapolis	3760
Seibold, Henry J.....	Fort Wayne	3849
Selby, Fred S.....	Laporte	1725
Selman, Thomas H.....	Greenfield	2051
Senrich, Geo. A.....	South Bend	1192
Servies, H. D.....	New Market	449
Setser, Henry H.....	Leavenworth	1801

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Settle, Charles E.....	Freetown	1626
Seward, Robert A.....	Alexandria	2346
Shadel, Charles F.....	Plymouth	2316
Shaefer, Fred K.....	Berne	407
Shafer, Charles W.....	Mentone	2321
Shafer, Abram	La Paz	3784
Shake, Homer O.....	Indianapolis	2109
Shaney, Chas. A.....	Indianapolis	3265
Shank, Henry A.....	Angola	2440
Shanks, William C.....	Salem	3240
Shanks, Frank H.....	Deer Creek	1152
Shorb, Willard N.....	Indianapolis	3533
Sharp, Joseph G.....	Coatesville	1077
Sharples, Phillip D.....	Laporte	3486
Shearer, William H.....	Lafayette	5388
Sheckel, Jas. B.....	Sandford	983
Sheeets, W. H. H.....	Indianapolis	1272
Sheets, W. C.....	Indianapolis	2097
Shelly, Oliver G.....	Marion	208
Shelburne, Samuel R.....	Zionsville	2715
Shelburne, Jasper C.....	Zionsville	2714
Shepard, Earl R.....	Anderson	3010
Shepard, Solomon D.....	Anderson	3011
Shepard, Charles	Raub	200
Shepherd, George W.....	Red Key	2312
Sheppard, Freddy	Brookville	5454
Sheridan, Merritt A.....	Evansville	1503
Sherman, Robert Edward	Morristown	5436
Sherrod, Margaret L.....	Paoli	370
Shertzer, Walter W.....	Bloomfield	5244
Shewmaker, Walter	Muncie	574
Shewalter, Charles E.....	Montpelier	5464
Shinard, Earl C.....	Fort Wayne	5287
Shinn, Elmer E.....	Hartford City	2661
Shinkle, Charles R.....	Muncie	3601
Shinkle, Florimond Livingston	Muncie	3600
Shock, Edward A.....	Peru	2780
Shoptaugh, M. E.....	Princeton	991
Shore, Perry M.....	Rochester	394
Shore, Earl B.....	Rochester	569
Shroyer, Charles	Warsaw	5036
Shull, Edward L.....	Bryant	2148
Shull, Lonzo L.....	Kokomo	5473
Shumm, A. C.....	Clarksburg	1974
Siddons, William E.....	Marion	2836
Siddons, Walter L.....	Marion	2762
Sieffert, Frank W.....	Evansville	376
Siefert, William H.....	Muncie	1001
Siegrist, C. F.....	Indianapolis	1851

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Sievers, John F.....	Valparaiso	3864
Sievers, Rolla Geo.....	Valparaiso	5294
Sigl, Joseph A.....	Fort Wayne	3224
Silverburg, Victor E.....	Muncie	587
Sims, William G.....	Swayzee	2222
Simons, James S.....	Lyons	1439
Simpkins, W. D.....	Boswell	418
Sisson, Andrew C.....	Hazleton	5308
Sisson, Winfield S.....	Hazleton	485
Skinner, Chas. V.....	Salamonie	178
Skinner, Fran.....	Macy	251
Slattery, Watie A.....	Culver	444
Slattery, Thomas E.....	Culver	446
Slaybaugh, U. G.....	Rochester	1402
Sloan, John N.....	Spencer	2946
Sloan, William Willshire.....	French Lick	2525
Sloan, Geo. D.....	New Albany	18
Slupley, John B.....	Disko	2193
Slutz, J. O.....	Ligonier	2935
Sluyter, Samuel D.....	Chalmers	1803
Small, H. M.....	Carmel	3270
Small, L. J.....	Carmel	3269
Smethurst, Frank M.....	Warren	1110
Smethurst, Chas. S.....	Converse	471
Smiley, Frank	Matthews	2660
Smith, F. S.....	Loogootee	3822
Smith, Frank	Indianapolis	3277
Smith, Oscar C.....	Kokomo	2600
Smith, Tilden	Vallonia	1797
Smith, Frank	Washington	1236
Smith, Asa E.....	Logansport	5225
Smith, Hugh	Logansport	1117
Smith, William Vorhees	Cass	2199
Smith, Merle C.....	Osgood	5087
Smith, Sam M.....	Osgood	2710
Smith, Marie R.....	Orland	2862
Smith, Emanuel A.....	Birdseye	3341
Smith, T. M.....	Upland	1694
Smith, Henry W.....	Rockport	3129
Smith, Arthur C.....	Valparaiso	1165
Smith, Jacob E.....	Greentown	5298
Smith, Arthur F.....	South Bend	5348
Smith, Ray	Brazil	3098
Smith, Clyde N.....	Spiceland	5038
Smith, George G.....	Indianapolis	3844
Smith, Wm. R.....	Laurel	1668
Smith, Marshal C.....	Madison	3060
Smith, Benjamin J.....	Decatur	1693
Smith, Ed.....	New Castle	2491

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Smith, Herbert B.....	Marion	5450
Smith, W. M.....	Princeton	2871
Smith, Guy E.....	Peru	381
Smith, John W.....	Poseyville	1856
Smith, Andrew	Dana	668
Smith, Lindley A.....	Winamac	3589
Smith, Elmer W.....	Winamac	3588
Smith, Lula M.....	Indianapolis	430
Smith, H. E.....	Goshen	815
Smock, Charles	Lafayette	5077
Smock, Herman H.....	Sullivan	374
Smock, Joe K.....	Sullivan	373
Smoot, D. B.....	Washington	3484
Smoot, William P.....	Washington	3483
Smuck, Frederick B.....	Peru	5356
Snapp, James M.....	Bedford	3152
Sneed, Bert E.....	Elwood	2657
Snoberger, Ira U.....	Walkerton	2565
Snoddy, Robert Chalmers.....	Crawfordsville	5371
Snoddy, William J.....	West Lafayette	1471
Snyder, Alfred H.....	South Bend	549
Snyder, Wm. Temple.....	Richmond	154
Snyder, James D.....	Kendallville	1024
Snyder, Ebenezer Justine.....	Camden	3382
Snyder, Earl R.....	Troy	5442
Snyder, Oliver T.....	Sharpsville	2876
Soest, Miss Edith	Fort Wayne	5306
Soest, Henry W.....	Fort Wayne	1862
Soest, Louis S.....	Fort Wayne	1864
Somes, Jas. E.....	Terre Haute	46
Sourbier, B. F.....	East Germantown	1256
Sourwine, J. N.....	Brazil	2246
Sowers, Jacob J.....	Hartford City	2829
Spain, Robert T.....	Terre Haute	5466
Sparks, Walter F.....	Anderson	2026
Spaulding, Thomas	Terre Haute	2822
Spaulding, Laura H.....	Terre Haute	2821
Spear, Robert	East Chicago	2791
Speckbaugh, Lewis	Tipton	5488
Spencer, John A.....	Versailles	2280
Spencer, M. D.....	Versailles	3312
Spencer, Benj. F.....	Versailles	3777
Spencer, Edgar	Wolcott	1546
Spencer, Reed	Wolcott	1544
Spicely, C. M.....	Connersville	1373
Spicely, Harry	Indianapolis	5098
Spillman, Carl	Oakland City	5362
Spivey, James R.....	Bluffton	291
Spaeth, Eugene	Michigan City	359

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Spohn, Henry L.....	South Bend	3865
Spraudel, Gustav P.....	Kendallville	1490
Spring, Robert Burr.....	Lafayette	1078
Sprowl, John S.....	Warren	592
Sprowl, George M.....	Indianapolis	1375
Sprowl, Joseph G.....	Warren	2999
Sproule, James Edward, Jr.....	Indianapolis	2941
Stacy, Joseph L.....	Indianapolis	2483
Stage, James B.....	Lima	420
Stagg, Harvey Duvall.....	Indianapolis	709
Staggs, Edgard A.....	Cory	100
Stahlhuth, Ernest H. W.....	Columbus	616
Stalcup, Harry Reid	Jacksonville	5434
Stalcup, John B.....	Terre Haute	3029
Stalker, Charles Homer	Borden	1680
Stalker, Benjamin F.....	Borden	37
Stalker, J. B.....	Borden	38
Stalker, William H.....	New Albany	1285
Staley, James P.....	Lebanon	1000
Staman, Ashton	Auburn	5026
Stammel, Edward W.....	Indianapolis	2030
Stansbury, William E.....	Kokomo	804
Stapp, Frank	Hope	1464
Stapp, Simeon	Hope	1463
Stappenbeck, Henry David.....	Valparaiso	5309
Stark, Herschel V.....	Shelburn	1162
Starr, G. W.....	Bainbridge	700
Starr, Fred M.....	Bainbridge	2673
Starr, M. F.....	Hagerstown	3507
Starrett, Walter K.....	Marion	2313
Starrett, William L.....	Anderson	2459
Staton, M. F.....	Thorntown	1040
Stauffer, Edwin R.....	Hammond	2881
Stearnes, Harvard	Bruce Lake	1743
Stebbins, Fred A.....	Montezuma	2048
Stedtfeld, W. C.....	Indianapolis	1006
Steele, Eugene S.....	Kentland	536
Steele, Charles Allen	Indianapolis	3053
Steele, Geo. W.....	Crawfordsville	1310
Steele, Roy Landon.....	Indianapolis	5196
Steelman, Henry	Linton	1574
Stehle, Bernard E.....	Matthews	1765
Stein, Dr. Frank J.....	New Albany	2515
Stein, Wm.....	Indianapolis	3598
Steine, Edwin H.....	South Bend	5340
Steinkohl, Louis J.....	South Bend	5322
Stellhorn, Fred William.....	Fort Wayne	3214
Stembaugh, C. L.....	Kingman	3479
Steugel, Christian	Berne	256

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Stephens, John A.....	Indianapolis	1455
Stephens, Edgar R.....	Newport	2494
Stevens, George L.....	Portland	615
Stevens, Victor E.....	Hope	535
Stevens, Albert J.....	Huntington	571
Stevens, William P.....	Muncie	2181
Stevens, Thomas N.....	Freedom	2006
Stevens, John Edwin	Cynthiana	5261
Stevens, Edward M.....	Vevay	459
Stephenson, Oliver W.....	Orleans	1438
Stevenson, Charles	Jamestown	3654
Stevenson, Chauncey C.....	Mentone	1840
Stewart, Marion	Muncie	480
Stewart, Carlos R.....	Winchester	490
Stewart, William F.....	Muncie	3554
Stewart, Maurice G.....	Westport	3181
Stewart, Joseph Henry.....	Colburn	1266
Stick, Orville L.....	New Pittsburg	930
Stick, Stephen A. D.....	Albany	2178
Stiles, Thomas P.....	Millersburg	2873
Stilwell, R. J.....	Ewing	617
Stiver, Noble C.....	Kokomo	5145
Stitt, Leonard G.....	Indianapolis	2467
Stitz, John G.....	Indianapolis	2450
Stockdell, Theodore	New Albany	26
Stockman, Louis S.....	Indianapolis	2091
Stockton, George P.....	Indianapolis	1804
Stoehr, John J.....	Garrett	747
Stokes, John Wesley.....	Indianapolis	2484
Stokes, Lorenzo T.....	Linden	580
Stokes, Joseph T.....	Indianapolis	2480
Stoll, Otto H.....	Logansport	1016
Stone, R. L.....	Albion	1129
Stone, Harry D.....	Albion	1128
Stone, Sam G.....	Butler	1664
Stonebraker, Pratt W.....	Burlington	264
Stonecipher, J. H.....	Hagerstown	3872
Stork, Dr. H. W.....	Holland	2920
Stormout, Ralph M.....	Indianapolis	5118
Stout, M. A.....	Bluffton	2266
Stout, Andrew J.....	Hamilton	2711
Stover, James Carleton	Muncie	481
Stover, George F.....	Fort Wayne	1141
Stowers, Ernest C.....	Indianapolis	69
Stowers, Jesse L.....	Indianapolis	1275
Stoy, W. L.....	Odon	1823
Strain, Harry Franklin	Harrodsburg	3704
Strickler, R. H.....	Boggsstown	3437
Strickland, Roy J.....	Owensville	3158

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Strickland, H. L.....	Owensville	3159
Striebel, Frank D.....	South Bend	211
Stringfellow, Harry	Elwood	908
Stuart, E. Eugene	Indianapolis	421
Stuart, Lenna C.....	Indianapolis	881
Stucky, Edward W.....	Indianapolis	5147
Stuckmeyer, Edward A.....	Indianapolis	1631
Stuckmeyer, William Edward.....	Indianapolis	2489
Stuckmeyer, John H.....	Indianapolis	1441
Sturgis, John E.....	Bluffton	1056
Sturgis, Will C.....	National Military Home...	2265
Stuteville, Herbert O.....	Grand View	717
Sublette, John Hughes	Point Isabel	3631
Sudhoff, William H.....	Richmond	1160
Sudhoff, Gustave H.....	Richmond	1159
Suifr, Chas. E.....	Hamilton	1883
Sullivan, James H.....	Royal Center	276
Sum, Aloysius M.....	Washington	5165
Suman, George O.....	Daleville	2509
Summers, Thomas A.....	Hillsboro	1085
Summers, Charles D.....	Marengo	3335
Summerville, W. E.....	Indianapolis	1865
Sumner, Walter C.....	Seymour	2786
Sunthimer, J. E.....	Shipshewana	1194
Sutter, Wilbur M.....	Valparaiso	5484
Swadley, Edgar W.....	Wabash	632
Swadley, George W.....	Wabash	630
Swartz, Harry D.....	Crown Point	339
Swartz, Henry P.....	Crown Point	340
Sweany, Willis E.....	Monroeville	2610
Sweany, William O.....	Monroeville	1113
Szybowicz, Leonard	South Bend	355
St. John, Robert	Greensburg	606
Taber, Mont C.....	Terre Haute	5102
Talbott, Daniel M.....	Earl Park	199
Tanke, Mrs. E.....	Pendleton	1681
Tanke, E.....	Pendleton	1434
Tanner, Edwin L.....	Plymouth	1197
Tanner, Lucius	Plymouth	1199
Tanner, Frank C.....	Plymouth	1198
Tarleton, William B.....	Martinsville	1871
Tarleton, Edgar	Martinsville	3281
Tappen, Charles S.....	Liberty	1179
Taylor, Otto A.....	Edinburg	3230
Taylor, James M.....	Indianapolis	2972
Traub, George F.....	Indianapolis	2734
Traub, Sarah E.....	Indianapolis	2735
Traub, Mary S. E.....	Indianapolis	3481
Traub, Charles G.....	Indianapolis	3482

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Travioli, Herbert B.....	Terre Haute	2293
Traylor, Wm. Gip	Petersburg	3215
Thrapp, Elmer E.....	Avilla	258
Teal, George B.....	Brimfield	3320
Tegtmeier, H. W.....	Fort Wayne	1889
Trees, J. H.....	Indianapolis	2834
Temple, Burton	Anderson	2125
Temple, Elonzo V.....	Frankfort	2581
Tompkins, Edmund W.....	Indianapolis	1334
Templin, James L.....	Blountsville	3259
Tepe, Louis	Evansville	98
Tepe, Harry A.....	Evansville	97
Tepe, Mary A.....	Evansville	96
Tepe, George W.....	Evansville	1454
Teeter, Wade B.....	Muncie	5380
Teeter, George M.....	Pennville	874
Tesh, Ulysses E.....	Camden	2264
Twente, Louis F.....	Indianapolis	5328
Trembly, Daniel S.....	Liberty	3022
Ticen, William M.....	Colfax	1588
Tidrick, Reuben R.....	Bringinghurst	1139
Tidrick, Ruskin O.....	Bringinghurst	3254
Tilford, Roy Edgar	Martinsville	1870
Timberlake, A.....	Indianapolis	327
Timmons, George D.....	Valparaiso	5052
Timmons, Charles Warren	Wolcott	5204
Trimble, Hester Ann.....	St. Paul	3451
Thiebaud, Charles O.....	Peru	3331
Thiebaud, Hugh McCallum	Vevay	2343
Tritt, Harry C.....	Logansport	3717
Thistlewaite, Clem	Richmond	3519
Todd, Ira L.....	Bringinghurst	5180
Todd, C. Alvan	Indianapolis	5374
Todhunter, James M.....	Kokomo	2828
Torbeck, Joseph H.....	Richmond	3494
Toler, Hilbert H.....	Richmond	2917
Tompkins, J. H. F.....	Indianapolis	2925
Tompkins, John W.....	Kokomo	1878
Thompson, Earl H.....	Elwood	3039
Thompson, John	Washington	1736
Thompson, Inez	Elizabethtown	3887
Thompson, Cyrus L.....	Danville	2645
Totten, Ira B.....	Fairland	713
Townsend, William	Remington	205
Townsend, James W.....	Elkhart	1659
Townsend, Claude	Remington	204
Townsley, Frank L.....	East Chicago	2198
Townsley, L. E.....	Vincennes	1207
Thomas, George A.....	Elkhart	2472

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Thomas, J. C.....	Boonville	1707
Thomas, Felix W.....	Winamac	33
Thomas, J. F.....	Lagrange	2421
Thomas, James L.....	Royal Centre	2010
Thomas, Daniel E.....	Center	1892
Thomas, George M.....	Warsaw	3252
Thomas, Arden H.....	Fortville	540
Thoms, Herman E.....	Indianapolis	310
Thorn, David C.....	Rising Sun	2777
Thorn, Léw E.....	Rising Sun	2776
Thornburn, Albert David	Indianapolis	5347
Thornburgh, Thomas R.....	Indianapolis	262
Thornburg, John H.....	Muncie	646
Thornburg, Chas. E.....	Muncie	573
Thornton, John F.....	Terre Haute	3349
Thornton, Felix G.....	Knightsville	2332
Troth, Robert A.....	Orleans	3379
Troth, Will V.....	Orleans	3380
Throop, James H.....	Carbon	2745
Throop, George E.....	Carbon	2746
Trotter, Lee B.....	Lizton	2700
Troutman, A. G.....	Oakland City	95
Troutman, Othello B.....	Oakland City	107
Throckmorton, Edward	Franklin	2838
Tuck, Mrs. N. T.....	Wolcottville	904
Tuck, James	Wolcottville	905
Tucker, Fred W.....	Warsaw	1302
Turman, Lee	Logansport	2192
Turner, Edwin D.....	Indianapolis	5262
Turner, Frank	Newport	3381
Thune, Charles C.....	Valparaiso	3565
Trulock, John F.....	Indianapolis	3675
Trusler, Charles L.....	Indianapolis	3579
Tyler, William T.....	Utica	1173
Tyrrel, Alexander D.....	Connersville	3797
Talbott, Abram H.....	Greensburg	1096
Tilford, Benjamin W.....	Martinsville	1089
Teeter, Albert T.....	Pennville	875
Terstegge, Joseph H.....	Terre Haute	2147
Tidrick, Rollin S.....	Bringinghurst	1138
Tillett, Minnie	Francesville	2228
Tillett, J. E.....	Francesville	2227
Truitt, Roland S.....	Noblesville	1735
Truitt, A. W.....	Noblesville	1686
Ulrich, John	Aurora	2720
Ulrich, M. B.....	Terre Haute	5317
Updegraff, Harry H.....	Wabash	2367
Utterback, T. C.....	Cloverdale	3802
Vance, Alsey E.....	Peru	3733

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Vanstone, Francis	Evansville	3309
Vaughn, Alfred W.	Indianapolis	228
Vaughn, Lynn D.	Atwood	975
Vaughn, William H.	Atwood	974
Vawter, Frank S.	Tipton	464
Vawter, Wm. H.	Lafayette	1722
Veaco, Sidney H.	East Chicago	5316
Veazey, Ida B.	Medora	3120
Vellom, Lemuel	Saltillo	3297
Vellinger, Warren Albert	Lafayette	5291
Venard, Lola A.	Ladoga	73
Venard, T. J.	Ladoga	72
Verner, Augustus	Liberty	3705
Vestal, Charles E.	Indianapolis	2743
Vigus, S. E.	Wabash	3428
Vogt, Fred H.	Indianapolis	1072
Vurpillat, Victor J.	Logansport	866
Van Etta, Harry S.	Orland	5133
Van Etta, Smith	Orland	3697
Van Gundy, Perry	Rockfield	2781
Van Pelt, J. H.	Thorntown	432
Van Rie, Leo P.	Mishawaka	5402
Van Sweringen, Garrette	Ft. Wayne	2943
Van Trees, Warren	Washington	1861
Van Voorhies, Melvin H.	Waterloo	2630
Van Winkle, T. P.	Hartford City	2830
Van Zandt, Carl	Brownsburg	5324
Ver Wayne, Joseph H.	Evansville	305
Von Tesman, Otto	Indianapolis	1775
Wade, Frank J.	Laporte	2060
Waddell, Minn I.	Indianapolis	1547
Waggoner, Wm. D.	Terre Haute	1356
Waggoner, Simeon	Terre Haute	703
Wagle, Matthew James	New Augusta	2001
Wagner, Earl P.	South Bend	719
Wagner, Emma E.	Cannelton	2575
Wagner, John H.	Winamac	3467
Waid, James M.	Uniondale	318
Waite, William J.	Rushville	2835
Wakefield, Jno. E.	Indianapolis	1316
Wakeman, Leroy B.	North Judson	5414
Walden, Chas. M.	Evansville	1387
Walk, John E.	Fredericksburg	347
Walker, George A.	Loogootee	2286
Walker, Edwin Teel	Indianapolis	806
Walker, Terry S.	Hagerstown	3583
Walker, Isaac James	Pennville	3033
Walker, Samuel P.	New Albany	226
Walker, Frank W.	Clinton	1171

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Wilker, Giles D.....	Clinton	1172
Walker, Charles G.....	Indianapolis	3376
Wall, Francis M.....	Warren	591
Wallace, William H.....	Indianapolis	1701
Wallace, D. H.....	Veedersburg	487
Wallace, Lemuel B.....	Francisco	3836
Wallick, Ben. S.....	Valparaiso	5397
Walling, Lewis G.....	Pennville	560
Walser, John A.....	Anderson	1923
Waltemath, Wm. S.....	Fort Wayne	3048
Walters, J. S.....	Nappanee	855
Walter, Chas. A.....	Huntington	2463
Walter, Rudolph	Lawrenceburg	1263
Walters, John H.....	Nappanee	856
Walters, William J.....	Battle Ground	2811
Walters, Arthur Louis	Indianapolis	5198
Walterhouse, Gillam	Indianapolis	1548
Walts, Scott M.....	Milltown	241
Ward, Charles B.....	Noblesville	2609
Ward, Andrew J.....	Veedersburg	1090
Ward, Frank E.....	Indianapolis	197
Ward, Frank J.....	Otterbein	5411
Ward, John N.....	Indianapolis	213
Warford, Franklin M.....	Cicero	1972
Warne, Charles H.....	Hobbs	185
Warne, Francis D.....	New Carlisle	636
Warner, William H.....	Crothersville	3524
Warner, Cortice M.....	Indianapolis	2651
Warner, J. A.....	Crothersville	3619
Washburn, Aquilla A.....	Clinton	3771
Waters, Frank R.....	Indianapolis	3439
Waters, Henry H.....	Terre Haute	1410
Watjin, Herman Otto.....	Vincennes	1669
Watjin, Herman J.....	Vincennes	162
Watjin, Woodville C.....	Vincennes	161
Watkins, Chas. W.....	Indianapolis	2770
Watts, Frank E.....	Broad Ripple	2370
Watts, James M.....	Broad Ripple	2371
Watson, Geo. G.....	Jeffersonville	245
Watson, Claude E	Martinsville	3668
Watson, John B.....	Warsaw	389
Wawrzon, John S.....	South Bend	734
Wayman, J. C.....	New Castle	207
Weaver, George J.....	Pleasant Lake	150
Weaver, John B.....	Shipshewana	159
Weber, Wilson Henry.....	Roann	1284
Weber, George M.....	Indianapolis	3304
Weber, Robert	Fort Wayne	3917
Weber, William	Evansville	436

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Weber, Fred E.....	Centerville	2639
Weber, William H.....	Richmond	3839
Weber, William C.....	Indianapolis	3694
Wedding, Millard F.....	Rome	5186
Weesner, Theodore M.....	Indianapolis	3162
Weever, Harold Chas.....	Mt. Vernon	5378
Weever, C. H.....	Boswell	1126
Wehrel, Frank J.....	Indianapolis	3786
Weihe, Emil	Fort Wayne	1322
Weinke, Herman J.....	Muncie	5376
Weinland, Harry E.....	Brazil	1843
Weis, L. Harry.....	Hammond	5241
Weis, Joseph W.....	Hammond	2358
Weiser, Mary A.....	South Bend	530
Weiser, Daniel D.....	South Bend	531
Weiser, William A.....	South Bend	529
Weiss, Theodore Meurer.....	Indianapolis	2299
Weiss, Carl Christian.....	Indianapolis	2952
Wells, John H.....	Evansville	166
Wells, John S.....	Bicknell	2374
Wells, Albert A.....	Lafayette	2101
Wenzler, John C.....	Fort Wayne	841
Wenzler, Fred	Plymouth	1589
Went, Edward C.....	Mishawaka	5231
Werker, Herman J.....	Vincennes	2902
Werner, William F.....	Indianapolis	19
Werner, Fred F.....	Morgantown	1691
Werntz, David V.....	Wakarusa	3544
Wert, Dallas	Stroh	3250
Wertz, Clyde S.....	Delphi	5443
West, James F.....	Brookville	851
West, Charles Wood.....	Terre Haute	1354
West, James M.....	Petersburg	1608
Wetzel, Lewis O.....	Marion	869
Wetzeel, Frank J.....	Indianapolis	5418
Wheat, W. W.....	Mecca	2215
Whetzel, Paul D.....	Greenfield	5427
Wheatcroft, Charles H.....	New Harmony	963
Wheeler, Ernest P.....	Indianapolis	5185
Whysong, Clem C.....	Angola	5304
Whinrey, Edwin A.....	Muncie	5444
Widmer, Fred R.....	Dayton	1458
Wiese, L. C.....	Indianapolis	2531
Wiesjahn, John G.....	Wanatah	777
Wiesjahn, William H.....	Wanatah	5406
Wilde, Dr. G. O.....	Boonville	1451
Wilderman, George F.....	Howell	848
Wiles, Wood	Bloomington	516
Wiles, T. C.....	Marion	67

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Wilkins, Oscar B.....	Oxford	2089
Wilken, John H.....	Fort Wayne	2424
Wilkes, Robert A.....	Edinburg	2849
Willeford, George W.....	Washington	3520
Willeford, Geo. A.....	Indianapolis	3430
Willison, John A.....	Terre Haute	3092
Williams, Jirah B.....	North Manchester	3056
Williams, Robt. B.....	Odon	1418
Williams, W. A.....	Rome City	686
Williams, William Henry.....	Valparaiso	3499
Williams, Samuel J.....	Ligonier	388
Williams, W. R.....	Greenville	479
Williams, Harry	Bloomfield	3496
Williams, Bert E.....	Walkerton	336
Williams, Charles C.....	Jasonville	2561
Williamson, Alva	Sweetser	1473
Williamson, George	Sweetser	1474
Williamson, William N.....	Indianapolis	2319
Willetts, Charles C.....	Michigan City	403
Wills, Leslie A.....	Lewisville	3347
Wills, John B.....	Cambridge City	3348
Wilmuth, William D.....	New Harmony	962
Wilson, Minnie	Milford	834
Wilson, Edgar H.....	Indianapolis	1457
Wilson, Harry	Crawfordsville	712
Wilson, Jesse E. M.....	Indianapolis	830
Wilson, Charles Frazee	Rushville	5277
Wilson, John L.....	Roachdale	5299
Wiltshire, Leonard C.....	Lafayette	319
Wiltshire, Roland A.....	Gwynneville	320
Winders, Oliver P.....	Arcadia	3640
Winegar, Logan J.....	Vincennes	108
Winger, Benjamin J.....	Williamsport	5256
Wink, Henry Vern	Knightstown	5352
Winn, Frank C.....	Taylorsville	2260
Winter, William	Martinsville	847
Winters, Mrs. Annie L.....	Lebanon	3831
Wirick, William F.....	Warsaw	2725
Withers, Oliver P.....	Indianapolis	1652
Witsman, S. W.....	French Lick	1794
Witty, James H.....	Indianapolis	3036
Wixson, Byron O.....	Marion	1304
Whinerey, James W.....	Muncie	2474
Whipple, Olney	Portland	2320
White, J. H. B.....	Winchester	451
White, Alonzo	Alamo	3222
White, Ira	South Bend	353
White, John T.....	Terre Haute	2263
White, Sam A.....	Sullivan	2278

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
White, Elmer E.....	Union City	3280
Whitehead, Edward E.....	Goshen	180
Whiting, Ulysses G.....	New Harmony	3818
Whitmore, William H.....	North Judson	1235
Whitenack, John H.....	Indianapolis	1525
Whitsel, Wm. C.....	Lafayette	2211
Wojahn, Herman G.....	Wanatah	778
Wolcott, Frank E.....	Rushville	649
Wolfe, Charles S.....	Dana	5
Wolfe, L. O. P.....	Mauckport	824
Wolfgang, Louis	Evansville	1224
Wolfgang, John W.....	Evansville	1225
Wolpert, William I.....	Elizabeth	1666
wolter, Paul Ernest	South Bend	943
Wolverton, Harry C.....	Rushville	385
Wollenmann, Dr. Aloys G.....	Ferdinand	3389
Wood, Charles Edwin.....	Evansville	1361
Wood, Chase	Lafayette	252
Wood, Nathan R.....	Hammond	3564
Wood, Robert C.....	Franklin	2839
Woods, Ralph H.....	South Bend	923
Woodard, Oscar	Bloomington	1017
Woodbury, William W.....	Indianapolis	2964
Wooden, Jeremiah	Gosport	2462
Woodruff, Ray	Ligonier	2984
Woodruff, Allen	Ligonier	2779
Woodson, William F.....	Michigan City	296
Woodworth, Benj. S.....	Fort Wayne	1714
Woodworth, Chas. B.....	Fort Wayne	1717
Woolley, John W.....	Wabash	3122
Woolsey, William S.....	Winslow	2549
Worsham, William Milton	Connersville	756
Wrenick, Thomas C.....	Morristown	3513
Wright, James A.....	Georgetown	118
Wright, Benjamin C.....	Indian Springs	5014
Wright, John Loraine	Greensburg	2760
Wright, A. F.....	Nineveh	3510
Wyatt, Charles G.....	Gaston	2233
Wyman, S. L.....	Elkhart	1572
Wyman, Willard Le Roy.....	Elkhart	5174
Wyrick, S. R.....	Angola	5441
Wysong, Marcus D.....	Indianapolis	846
Wytttenbach, Claude	Fairmount	344
Wytttenbach, John	Evansville	343
Yager, Louis P.....	Decatur	2442
Yager, Leo, Jr.....	Decatur	1648
Yazel, Archibald	Elnora	3099
Yeager, Emory J.....	Lafayette	1936
Yeager, Albert Elton	Indianapolis	3681

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Yerian, Clyde E.....	Fort Wayne	5338
York, Arthur R.....	Cloverdale	5476
Youmans, Ida J.....	Anderson	3360
Youmans, Samuel F.....	Anderson	628
Yount, Allen C.....	Yountsville	2521
Youse, Edward E.....	Markle	2802
Zahrt, Ed C.....	Laporte	1342
Zapp, A. J. Colburn.....	Evansville	528
Zerse, Ella	Mt. Vernon	2793
Zerse, O. G.....	Mt. Vernon	2792
Zimmer, Harry E.....	Indianapolis	110
Zimmermann, T. A. G. A.....	Terre Haute	1240
Zimmermann, Jonathan	Lynnville	1672
Zimmermann, John	Fort Wayne	2362
Zimmermann, Martin F. W.....	Fort Wayne.....	2345
Zimmermann, Charles L.....	Indianapolis	1613
Zimmerman, Herman	Terre Haute	325
Zinninger, Herman L.....	Logansport	3807
Zook, James E.....	Lima	769
Zugelhaur, John A.....	New Albany	79
Zuerner, Joseph	Jeffersonville	3821

NON-RESIDENT REGISTERED PHARMACISTS

TO WHOM CERTIFICATES WERE ISSUED IN 1907.

ALPHABETICALLY ARRANGED.

<i>Name.</i>	<i>Location</i>	<i>Number.</i>
Akers, Owen M.....	St. Matthews, Ky.....	345
Alexander, Mrs. Mary Robinson.....	Chicago, Ill.....	642
Anderson, Charles E.....	Los Angeles, Cal.....	489
Artman, Elza E.....	Galion, Ohio	5490
Ayers, O. N.....	Denver, Colo.....	2077
Beckley, Edgar H.....	Macon, Ga.....	2934
Bissell, James R.....	Waterloo, Iowa	354
Black, Frank B.....	Gilboa, Ohio	3721
Blinn, J. E.....	Albuquerque, N. M.....	562
Boeres, A. O.....	Cincinnati, Ohio	1600
Barrow, Samuel A.....	Cleveland, Ohio	3878
Boyce, Harry Arthur	Decatur, Ill.....	849
Bryant, Thomas C.....	Stratford, Texas	1799
Burgess, Elmer	Los Angeles	1370
Burkhardt, Will N.....	St. Louis, Mo.....	1222
Burkit, Frank	Terry, S. D.....	3700
Burky, August C.....	Shanesville, Ohio	5320
Burton, Fred H.....	Dorchester, Mass.....	3089
Caraway, Walter M.....	Muskogee, I. T.....	5002
Carter, H. H.....	Lockport, Ill.....	5022
Caulkins, A. M.....	Columbus, Ohio	3208
Chambers, Frank	Los Angeles, Cal.....	1886
Clouse, Grace	Chicago, Ill.....	5100
Coady, Patrick	Paris, Ill.....	1942
Cook, Charles A.....	Fresno, Cal.....	3289
Cooper, Harry M.....	Chicago, Ill.....	2991
Crawford, L. B.....	Winslow, Ariz.....	698
Crillman, Harry R.....	Detroit, Mich.....	2340
Currey, John W.....	Spokane, Wash.....	578
Dalby, Arthur	Oakland, Kan.....	61
Dannettelle, Fenelin F.....	Cincinnati, Ohio	1529
Decker, M. L.....	Paw Paw, Mich.....	3837
Denton, Everett	Stratford, Texas	5258
Denton, James F.....	Stratford, Texas	2430
Donnelly, O. A.....	Chicago, Ill.....	3006
Doyle, Oscar	Bisbee, Ariz.....	1700
Dunkle, Hiram L.....	Hicksville, Ohio	818
Durham, Dr. J. I.....	Cincinnati, Ohio	3364

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Eckhardt, A. L.....	Milwaukee, Wis.....	2884
Edwards, A. L.....	Joplin, Mo.....	2271
Edwards, B. J.....	Joplin, Mo.....	2272
Ellis, Harry L.....	Chicago, Ill.....	994
Engle, Landis G.....	Danville, Ill.....	5130
Erpf, Arthur L.....	Pittsburg, Pa.....	5223
Espey, James G.....	Trinidad, Colo.....	1478
Esslinger, Edwin Walter	Danville, Ill.....	5158
Eubank, Thomas	New Madison, Ohio.....	5091
Ferris, Clarence H.....	Honolulu, Hawaii	3447
Field, Claude	Atlanta, Ga.....	350
Finck, Theo. W.....	Wheeling, W. Va.....	5494
Fischler, Alta E.....	Wellsboro, Pa.....	175
Fisher, Bernard	New Haven, Conn.....	49
Fisher, John Wm.....	Chicago, Ill.....	809
Fowler, George W.....	Loda, Ill.....	93
Fox, Willis H.....	Coldwater, Mich.....	5222
Frain, Will I.....	Litchfield, Ill.....	1632
Frank, Herman	St. Louis, Mo.....	2806
Frazier, L. Elliott.....	New Windsor, Colo.....	5042
Frey, Elias S.....	Louisville, Ky.....	5005
Frigon, Hearvy J.....	Kankakee, Ill.....	5232
Furchler, Ernest M.....	Wellsboro, Pa.....	9
Gable, Fred B.....	Kansas City, Mo.....	1605
Gallagher, Edward E.....	Denver, Colo.....	3421
Gertler, George F.....	Woodsfield, Ohio	5323
Gillespie, Zelle	South Haven, Mich.....	2158
Gooden, John S.....	Columbus, Ohio	2027
Grace, Paul	Grayville, Ill.....	5260
Greenawalt, Merton E.....	Holgate, Ohio	5131
Greere, C. E. F.....	St. Louis, Mo.....	3568
Gries, Henry A.....	Rhyolite, Nev.....	2599
Grizendanner, Chas. J.....	New Orleans, La.....	2287
Gunder, Jasper N.....	Chicago, Ill.....	1551
Gunder, Carl A.....	Chicago, Ill.....	1552
Halter, Charles L.....	Fremont, Ohio	1910
Hawkins, Clyde B.....	St. Louis, Mo.....	267
Helmick, M. E.....	Cincinnati, Ohio	3572
Henderson, Lena B.....	Chicago, Ill.....	1003
Henderson, James P.....	Chicago, Ill.....	1002
Henderson, Harvey M.....	Los Angeles, Cal.....	1561
Hermeoch, H. R.....	Washington, D. C.....	1963
Herman, J. B.....	Edgerton, Ohio	1987
Hickman, Charles Merrill.....	North Baltimore, Ohio.....	5295
Hodges, George A.....	Chicago, Ill.....	2959
Hollister, Geo. Stanton	Half Moon Bay, Cal.....	445
Hopkins, William Bernard.....	Louisville, Ky.....	5049
Horner, Edward F.....	Edgerton, Ohio	2281
Howey, True W.....	Carthage, S. D.....	557

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Howey, Etabel	Carthage, S. D.....	558
Hubbell, Chas. O.....	Plymouth, Mich.....	2882
Hutson, L. Eddy.....	Wichita, Kan.....	1037
Jensen, Niels	St. Paul, Minn.....	1528
Johnson, John V.....	3d Sta. Maria de la Rivera No. 9, Mexico D. F.....	1104
Johnson, Chas. J.....	Urbana, Ill.....	127
Jones, John Henry	Hopkinsville, Ky.....	5021
Jordan,, David C.....	Kansas City, Mo.....	2757
Jordan, William H.....	Cincinnati, Ohio	520
Jumper, Carl Everett	Velardina Dgo., Mexico....	1834
Kadish, Charles T.....	Paxton, Neb.....	595
Kahn, Ralph H.....	Chicago, Ill.....	5424
Keller, Frank X.....	Jonesboro, Ark.....	1200
Kilvary, R. D.....	Chicago, Ill.....	696
Lacer, Marion J.....	Edon, Ohio	5144
Landon, A. H.....	Chicago, Ill.....	1383
Lenard, Robert	South Chicago, Ill.....	3504
Logan, James H. B.....	Louisville, Ky.....	5784
Long, Hiram	Edgerton, Ohio	992
McDonald, Harry S.....	Louisville, Ky.....	5116
McFarland, Robert Lucius.....	Sharpsville, Pa.....	1827
McLeay, Herman	Iwine, Alta., Canada	2702
McVicker, George W.....	Apache, Okla.....	2886
Marrs, Frederick Addison.....	Paris, Ill.....	5359
Maston, Chas.....	Grand Rapids, Mich.....	729
Maston, Jettie Indiaola	Grand Rapids, Mich.....	728
Mather, Charles A.....	Dayton, Ohio	1244
Mattes, Leopold A.....	Pacific Grove, Cal.....	633
Meek, Jay	Sandusky, Ohio	5269
Mercer, Glenn H.....	Chicago, Ill.....	3219
Miersch, Rudolph V.....	Louisville, Ky.....	5109
Miller, Pearl H.....	Chillicothe, Ohio	5292
Miller, Charles Sidney.....	Wildwood, Fla.....	5037
Mills, William E.....	Maxwell, Iowa.....	724
Mitchell, M. M.....	Bluffton, Ohio	5215
Moor, Luther	College Corner, Ohio	3813
Moor, Wayne W.....	College Corner, Ohio	3816
Moor, Newton J.....	College Corner, Ohio	3815
Moore, H. O.....	Chicago, Ill.....	2966
Morey, O. M.....	Mulberry Grove, Ill.....	5007
Moss, Jerome H.....	Fitzgerald, Ga.....	568
Munett, Gustoff Henry	Chicago, Ill.....	5239
Mundt, J. Herman	Chelau, Wash.....	5237
Myers, Frank Emery.....	Columbus, Ohio	3205
Napieralski, Dr. Emanuel D.....	Chicago, Ill.....	2378
Nitardy, Ferdinand	Chicago, Ill.....	5353
Ohl, Edward W.....	Ashland, Ohio	5368
Ohning, John J.....	St. Louis, Mo.....	1674

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Orr, Frank L.....	Los Angeles, Cal.....	2579
Osborn, Guy	New York, N. Y.....	3874
Overman, Charles A.....	Chicago, Ill.....	184
Pannenberg, Arthur H.....	Chicago Heights, Ill.....	2880
Parker, Roy F.....	Chicago, Ill.....	5111
Peckinpugh, Chester M.....	Leipsic, Ohio	5326
Pfapflin, Henry A.....	Asheville, N. C.....	999
Pfau, Clarence E.....	Louisville, Ky.....	2095
Phares, G. M.....	Belvidere, Ill.....	3337
Prather, J. H.....	Louisville, Ky.....	105
Presnell, William C.....	Dundum, Sask.....	623
Prewitt, Thomas H.....	Chicago, Ill.....	2414
Pifer, C. M.....	Murfreesboro, Tenn.....	894
Porter, David O.....	New York, N. Y.....	3196
Powell, J. L.....	Bisbee, Ariz.....	346
Purdy, William M.....	Detroit, Mich.....	2304
Rathbun, Henry M.....	Lorain, Ohio	5305
Rauch, Frederick B.....	Morehouse, Mo.....	2863
Raver, L. H.....	Kramer, N. D.....	2283
Read, Pura M.....	Bowling Green, Ky.....	5115
Reed, Edwin E.....	Three Rivers, Mich.....	2595
Reed, James Harvey	Paris, Ill.	1627
Reed, Lewis H.....	Centralia, Ill.....	582
Roberts, Mont Le Roy	Cleveland, Ohio	5250
Rogers, H. M.....	Peoria, Ill.....	956
Rogers, Tiffin C.....	Greenville, Ohio	5178
Rohrig, P. Jay.....	Ferry, Mich.....	3806
Rowe, A. Oakley	Council Bluffs, Iowa	543
Sahm, Bernard C.....	Okeene, Okla.....	1384
Sander, H. W.....	Victor, Colo.....	5121
Schincke, Emil	Milwaukee, Wis.....	290
Schmidt, Florian Charles	Chicago, Ill.....	3475
Sennette, Earle J.....	Lawrence, Mass.....	3361
Shackelford, Wm. Hurst	San Antonio, Texas	660
Shively, Virgie M.....	West Louisville, Ky.....	2249
Sims, L.....	Enid, Okla.....	2666
Slater, Willis O.....	Chicago, Ill.....	740
Small, Dr. Harry E.....	Alpha, Ill.....	1545
Smoot, Samuel Carey	Campbell, Mo.....	1308
Sternberg, Morris	Chicago, Ill.....	5430
Stewart, Walter F.....	Milan, Tenn.....	3369
Stewart, J. A.....	Chicago, Ill.....	2906
Stocker, William E.....	St. Louis, Mo.....	1685
Stoner, Pearl	Big Sandy, Texas	1901
Starling, Selba C.....	Payne, Ohio	5435
Stoner, G. Dewitt	Big Sandy, Texas	1903
Stoner, Norma Le Clerc.....	New Madison, Ohio	5275
Stoner, J. J.....	Grand Rapids, Mich.....	2716
Teague, Orville C.....	Utica, Ohio	3262

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Thomas, Warren M.....	Detroit, Mich.....	278
Toler, A. Frederic	Butte, Mont.....	...
Tompkins, William Daniel	Mt. Sterling, Ill.....	594
Tudor, J. Wilber	Homer, Ill.	5024
Wachtell, John K.....	San Bernardino, Cal.....	315
Wahl, Charles E.....	Manitou, Colo.....	1015
Walker, Arthur L.....	Three Rivers, Mich.....	2888
Walmer, Dr. E. Le Rue	Harrisburg, Pa.....	1612
Westfall, W. Paul	Oklahoma City, Okla.....	5030
Whiteman, George W.....	Chippewa Falls, Wis.....	957
Wicks, Seth	Chicago, Ill.....	1749
Winslow, Brady V.....	Louisville, Ky.....	5212
Willett, Orris V.....	Elizabethtown, Ky.....	1800
Willeford, W. C.....	Marion, Ill.....	2638
Willard, Frank S.....	Sheldon, Ill.....	689
Will, Philip S.....	Folsom, Cal.....	950
Winters, E. T.....	Las Vegas, N. M.....	5194
Worden, Wm. E.....	Grand Rapids, Mich.....	1127
Wysocki, Edward	Chicago, Ill.....	3835
Yunck, William P.....	Cut Bank, Mont.....	1223

ASSISTANT REGISTERED PHARMACISTS

TO WHOM CERTIFICATES WERE ISSUED IN 1907.

ALPHABETICALLY ARRANGED.

<i>Name.</i>	<i>Location</i>	<i>Number.</i>
Abbott, Earl C.....	Indianapolis	828
Adams, Annie May	Indianapolis	136
Adams, William R.....	Frankfort	222
Adams, Ernest M.....	Warsaw	761
Adelsperg, Bernard E.....	Muncie	147
Albert, W. H.....	Freelandville	132
Albertson, William Charles	Indianapolis	561
Alford, Harry G.....	Richmond	218
Alleman, H. E.....	Argos	611
Allen, Harry Starr	Indianapolis	575
Allen, Joel E.....	Indianapolis	390
Anderson, August	North Salem	129
Antonides, Earl D.....	Warsaw	178
Applegate, Samuel W.....	South Bend	665
Appleman, Alvaris S.....	Marion	299
Arnold, Edward J.....	Indianapolis	731
Ashpaugh, Chas. A.....	Frankfort	146
Augsburger, Aaron C.....	Berne	60
Austin, Mary	New Albany	297
Baker, Edgar D.....	Warsaw	738
Bailey, Robert M.....	Bedford	723
Baird, Minnie Ola	Indianapolis	205
Ballard, Anna F.....	St. Paul	358
Ballenger, Belle	Sharpsville	249
Bannister, Dr. R. L.....	La Fontaine	522
Barney, G. D.....	Fort Wayne	728
Barrangler, J. Herbert	Bluffton	225
Bartholomew, Wm. C.....	Indianapolis	524
Barton, J. N.....	Eaton	252
Beaver, Harry William	Elkhart	4A
Beck, Walter W.....	Logansport	588
Bick, Peter H.....	Hammond	120
Bickel, Harry Elvin	Warsaw	734
Beck, Barton V.....	Burlington	832
Becker, Henry B.....	Terre Haute	263
Bell, A. Howard	Gary	712
Belton, Harry R.....	Acton	771
Benedict, Grace L.....	Springport	9

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bentz, Frank H.....	Elkhart	102
Bentz, Chas. E.....	Fort Wayne	89
Berry, Claude E.....	Muncie	256
Biggs, William M.....	Kewanna	638
Billman, R. O.....	Indianapolis	624
Binkley, Chas. Earl	Indianapolis	360
Bishop, William C.....	Greenwood	95
Black, Ruth	Blaine	365
Blass, Frank C.....	Indianapolis	600
Bohn, Mattie	Evansville	320
Bonge, Walter F.....	Hartford City	184
Boor, Howard H.....	New Castle	158
Boothe, Chester	Sullivan	589
Boyatt, Mahlon V.....	Indianapolis	582
Bradley, John	Wabash	181
Brannock, Elizabeth A.....	Evansville	278
Brickles, Jerry H.....	Knox	22A
Britton, L. M.....	Alexandria	623
Brizius, Herman	Newburgh	566
Brundick, Martha A.....	Huntingburg	347
Bryan, James O.....	Farmersburg	706
Bryant, James H.....	Frankfort	296
Bryer, S. W.....	Hope	504
Buchanan, Edith	Rising Sun	380
Buchanan, Hanna	Rising Sun	381
Buck, Arthur A.....	West College Corner	211
Buck, J. Cartwright	Laporte	106
Bullington, Harvey H.....	Indianapolis	141
Burgin, Elmer R.....	Indianapolis	208
Butts, Will L.....	Veedersburg	30
Callings, Ray I.....	Cicero	223
Campbell, Albert William	Huntington	652
Canon, Charles E.....	Muncie	780
Carnefr, Robert T.....	Indianapolis	726
Carter, Arthur B.....	Columbia City	701
Carter, Margarette M.....	Brookville	823
Casey, James M.....	South Bend	628
Cecil, Herman M.....	Muncie	604
Chandler, J. O.....	McCordsville	254
Clements, Chas. F.....	Jamestown	267
Clifford, Lora H.....	Indianapolis	41
Combs, Carrel M.....	Martinsville	277
Cooper, James W.....	Marshall	142
Cox, Martha A.....	Amboy	38
Cullum, Harry L.....	Carlisle	503
Cummins, Charles E.....	Harlan	228
Cummins, Joseph P.....	Middletown	284
Cunningham, Bertha J.....	Dunkirk	226
Criswell, William H.....	Churubusco	721

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Cronin, William B.....	Hartford City	191
Crosson, August	Evansville	791
Dailey, George W.....	Whiteland	185
Davis, William M.....	Terre Haute	342
Dalmbert, Carl A.....	Hope	291
Davis, Boyd M.....	Hudson	18A
Davis, Stephen M.....	Waynetown	550
Davenport, Sam F.....	Auburn	556
Deibel, H. Rudolph	Jeffersonville	157
Demberger, John A.....	Boonville	690
Dennis, J. B.....	Williamsport	138
Devol, Charlotte	New Albany	67
Diederich, Edw. C.....	Indianapolis	101
Dils, J. M.....	North Vernon	387
Doddridge, Orah A.....	Mentone	322
Downs, Tevis C.....	Indianapolis	746
Drybread, Charles H.....	Franklin	833
Drew, Riley J.....	Tiptecanoe	511
Dufor, Glen D.....	Ray	824
Dugan, Michael	Indianapolis	377
Dugan, John W.....	Elwood	722
Dunlevy, James Clegg	Scottsburg	763
Dutton, Harry F.....	Martinsville	298
De Camp, Annie E.....	Shelbyville	14
De Priest, Homer C.....	Vincennes	749
De Tar, B.....	Winslow	343
Edwards, Xan H.....	Fairmount	605
Emshwiller, Fred O.....	Montpelier	269
Englehart, George L.....	Brazil	792
Everroad, Harry Clyde	Muncie	188
Falls, Curtis G.....	Cambridge City	154
Fatout, Louis	Indianapolis	242
Ferguson, Mamie	Hudson	311
Fisler, Everet E.....	Elwood	339
Fleshman, Christina R.....	Mauckport	160
Folliott, L. Ruston	Indianapolis	677
Forrey, Vesta	Wawaka	76
Forster, Carl F.....	Evansville	729
Fort, Claude W.....	Greenfield	776
Fouts, John M.....	Centerville	557
Fox, Harmon B.....	Bicknell	662
Franklin, E. Carey	Bedford	42
Freeman, Gertie E.....	Terre Haute	153
Fritz, Herman J.....	Indianapolis	72
Fulk, Frederic L.....	Bloomington	751
Garver, Edison M.....	Logansport	562
Genolin, Charles	Nashville	633
Gentry, James D.....	Forest	563
Gerhart, Frank H.....	Kokomo	636

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Geyer, Anna	La Fontaine	123
Gift, George H.....	Rochester	783
Glascock, Arnett F.....	Lafayette	28
Glenn, Robert A.....	Brazil	170
Gough, Cecil R.....	Muncie	770
Goldman, Harry H.....	Elkhart	44
Goldsmith, Louis	Indianapolis	777
Graff, Le Roy H.....	Lafayette	804
Grafford, Lary J.....	New Carlisle	37
Graves, George Thomas	Mishawaka	616
Greer, J. Fenimore	Yorktown	255
Greger, Chas. E.....	Tampico	543
Gribben, Charles T.....	North Manchester	790
Griffin, Daniel P.....	Corydon	694
Griffin, Thomas A.....	Lafayette	318
Grunden, Will P.....	Willow Branch	155
Gunn, John H.....	Fort Wayne	786
Guthrie, Guy H.....	Greensburg	568
Hall, Harvey A.....	Roachdale	355
Hamusley, Clifford Morgan	Clinton	676
Handy, William S.....	Clinton	793
Hanna, Charles Ursel	Ladoga	549
Hanna, William P.....	Lafayette	21A
Hauptmeyer, Fred C.....	Evansville	56
Harris, Samuel S.....	Rockville	590
Harrison, Charles W.....	Albany	326
Harter, Jacob	North Manchester	88
Hastings, Frank Dale	Indianapolis	17A
Hauck, Clarence D.....	Shirley	250
Hazen, R. Parke	Marion	705
Hazelrigg, Dora	Adams	349
Heaton, Ruby F.....	Scircleville	645
Hearington, Howard Judson	Kokomo	5A
Hedges, Fred	Covington	173
Helms, Allen A.....	Dillsboro	784
Hemphill, James B.....	Rising Sun	43
Hemphill, J. T.....	Monon	251
Hendricks, John De Witt.....	Lizton	507
Hermann, Mrs. F. W.....	Evansville	59
Hine, Edward D.....	Indianapolis	765
Hitzelberger, Gustave	Indianapolis	733
Hoffmann, Oral V.....	Linn Grove	22
Honer, Edward J.....	Lafayette	574
Hontz, W. C.....	North Webster	400
Hooke, Hugh A.....	Muncie	714
Hoop, Philip Earl	Shelbyville	654
Hopkins, R. L.....	Arcadia	581
Hopkins, Jas. Stork	Princeton	696
Hoppes, Jesse L.....	Red Key	769

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Huff, Esque A.....	Indianapolis	83
Hughel, Sam'l L.....	Anderson	197
Hunemeier, Iva	Washington	261
Hunter, Elizabeth S.....	Raub	29
Hunter, Herbert Calvin	Greensburg	807
Hut, Cletus	Evansville	313
Jalbert, Eugene	Terre Haute	535
Jay, Joe P.....	Kokomo	653
Jennings, Robert G.....	Hammond	661
Jensen, Thomas	Wheatfield	778
Johnson, Mazie I.....	New Richmond	243
Jones, Everett W.....	Greencastle	752
Jones, Guy W.....	Hammond	699
Jones, Stanley	Shelbyville	594
Jordan, Clyde B.....	Fort Wayne	707
Keehn, Jesse D.....	Valparaiso	505
Keemer, E. B.....	Indianapolis	827
Kellar, Chas. Frederick	Brazil	394
Kelly, John R.....	Muncie	584
Kelly, Roy J.....	Roll	77
Kelleher, A. G.....	Danville	237
Kempf, Thikla T.....	Evansville	204
Kennedy, Alta F.....	Stockwell	119
Kenworthy, Harry L.....	Lebanon	302
Kessens, Walter B.....	Wallace	98
Kilander, William J.....	Markle	212
Kimberlin, Homer A.....	Anderson	55
King, Robert C.....	Wabash	545
Kleder, Donald D.....	Milford	48
Knamlem, Harry W.....	Indianapolis	692
Kneer, Charles J.....	Oaklandon	268
Knoefel, J. Oscar	New Albany	16A
Koehlinger, Philip Jacob William.....	Fort Wayne	678
Kraft, Edward	Evansville	758
Kramer, Otto F.....	Vincennes	19
Kurtz, Edward W.....	Goshen	740
Kuss, Emil G.....	South Bend	747
Lambert, Charles Irvin	Indianapolis	704
Lamberson, Henry	Michigantown	124
Lamson, Chas. B	Vevay	351
Laughner, Clyde Otto	Whitestown	258
Lawrence, Ora A.....	Warren	375
Lawshe, Charles H.....	Swayzee	620
Leonhardt, Elmer P.....	Bippus	602
Little, G. Robert, Jr.....	Indianapolis	820
Lollar, Nora	Saratoga	149
Lukens, Lawrence H.....	Richmond	579
Lusk, Chas. Routh	Bluffton	196
Lutz, James O.....	Zionsville	219

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Lyon, Glen F.....	Lafayette	779
Lybrook, Roland V.....	Logansport	825
McBride, W. F.....	Dayton	362
McClintic, A. M.....	Hartsville	529
McColley, Harry B.....	Indianapolis	338
McCord, Margaret B.....	Indianapolis	822
McCollough, Herbert	Franklin	240
McConnel, Paul H.....	Indianapolis	795
McCullough, Frank Von.....	New Albany	655
McIntosh, D. C.....	Worthington	767
McLaughlin, Chas. W.....	Kokomo	33
McFarland, Carl C.....	Logansport	830
McKnight, Mable E.....	Columbus	27
McMahon, J. Steely	Attica	803
Magee, Addison R.....	Greensburg	613
Manring, Clarence D.....	Greentown	642
Marker, Ernest	Jamestown	670
Marine, Pearl Dilloran	Hartford City	571
Martin, Adison L.....	Fort Wayne	834
Martinean, Fred W.....	Danville	679
Martin, John G.....	Lynn	831
Matthew, O. R.....	Mitchell	583
Mayberry, Wilber H.....	Gas City	303
Meiser, John Wilson	Monticello	564
Meloy, Paul	Indianapolis	348
Menaugh, W. Clyde	Wingate	530
Mendenhall, W. A.....	Indianapolis	344
Morton, Anna M.....	Knightsville	257
Miller, Emanuel B.....	Fort Wayne	316
Miller, Jesse E.....	Indianapolis	126
Miller, Waldo Weir	Angola	741
Miller, Clarence E.....	Indianapolis	608
Miller, Chas. H.....	Fort Wayne	659
Monroe, Harley R.....	Valparaiso	307
Morgan, Harmon K.....	Clinton	668
Morgan, Earl R.....	Anderson	643
Morgan, Jennie	Hebron	84
Morris, Robert Allen	Vincennes	577
Muchmore, Chas. K.....	Laurel	137
Murphy, Roscoe	Peru	538
Murr, Ferdinand Louis	Indianapolis	14A
Murray, Minnie	Dublin	234
Murray, John G.....	Connersville	663
Myers, Homer D.....	Rome City	759
Nash, Thomas B.....	Princecton	221
Neiger, John P.....	Danville	236
Nelson, Ira A.....	Crothersville	818
Nies, Chas. H.....	South Bend	68
Nihart, Arthur A.....	Albany	788

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Nilins, Robert	Indianapolis	167
Niswander, Clyde R.....	Goshen	216
Noble, Donald O.....	Michigan City	775
Noll, Geo. M. S.....	Fort Wayne	241
Nungester, Harry A.....	Connersville	789
O'Connor, Thomas Martin	Remington	715
Ogle, Thomas James, Jr.....	Wingate	229
Oren, Wm. A.....	Indianapolis	782
Orr, Grover C.....	Wabash	796
Osterman, Henry	Seymour	382
Owens, H. B.....	New Albany	118
Parker, Lloyd	Indianapolis	323
Paullus, John L.....	Marion	399
Payne, Horace	Mooney	314
Pearson, Ernest T.....	Logansport	262
Pelham, Frank E.....	Geneva	826
Perin, Roscoe C.....	Connersville	664
Pfeuder, George, Jr.....	Evansville	591
Phelps, Roley Holmes	New Albany	720
Phillips, Oscar	Hazleton	528
Pirnat, R. F.....	Evansville	1
Porter, Frank B.....	Parker	750
Porter, Benjamin	Logansport	244
Potts, Edd	Evansville	760
Pusinelli	Shirley	781
Rainier, Thos. Ed.....	Covington	517
Raymond, Ralph T.....	Indianapolis	697
Reed, Arthur E.....	South Bend	325
Reeder, Roy Blake	Terre Haute	641
Reeves, W. H.....	Freedom	90
Reeves, John L.....	Indianapolis	787
Reichel, Carl John	Shelbyville	748
Reiffel, Martin L.....	Indianapolis	73
Reiter, W. Detrick	Huntington	389
Rice, Owen Rolland	Indianapolis	736
Ridlen, Chas. W.....	Indianapolis	17
Riesbeck, J. V.....	Indianapolis	685
Ringer, Luther C.....	New Ross	195
Ritter, Clyde	Angola	675
Roach, Esic Colfax	Terre Haute	276
Robertson, Charles A.....	Salem	586
Robins, Augustus C.....	Shelbyville	821
Rockenbach, Rud. H. R.....	New Albany	3
Rodenbeck, Chas.	Arcadia	718
Ronk, Arthur C.....	Ladoga	198
Roudebush, Benj. F.....	Frankfort	719
Rour, Minerva J.....	Portland	117
Rucker, Jesse S.....	Greenfield	592
Rucker, S. G.....	Seymour	794

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Rudd, Fred	Hamilton	111
Ruggles, A. G., Jr.	Warsaw	815
Runcie, Viola	Fort Branch	312
Sale, Louis A.	Mitchell	819
Samuelson, Carl John	Hobart	324
Sanders, Charles P.	Kokomo	134
Sanger, Mrs. Mary F.	Lowell	379
Saulter, Carl M.	Indianapolis	774
Schillinger, Albert	Indianapolis	206
Schrichte, John Henry	Evansville	627
Schwartz, Carl H.	Huntingburg	295
Schwartz, Esther Anna	Huntingburg	328
Schwartz, Emma M.	Huntingburg	327
Schofield, Wm.	Terre Haute	772
Scott, Kraston P.	Hartford City	802
Scott, Sherman	South Bend	607
Seal, Bernard Waldo	Loogootee	597
Sechler, Merritt C.	St. Joe	2A
Sefton, Frank Hyde	Connersville	282
Sellers, Chas. A.	Montpelier	305
Sherman, Robert Edward	Morristown	686
Shirk, Clyde	Indianapolis	808
Short, Harry	New Palestine	214
Shull, Lonzo L.	Kokomo	683
Shull, Guy E.	Bryant	231
Shurte, Andrew J.	Terre Haute	700
Sisson, Raymond S.	Hazleton	764
Skinner, Roy M.	Albion	649
Slater, Roy	Clinton	183
Slusser, Charles A.	Lebanon	182
Smith, J. A.	Petersburg	293
Smith, Herbert B.	Marion	785
Smith, May E.	Indianapolis	304
Smith, Richard Wirt	Indianapolis	618
Snyder, Fred B.	Brook	12
Speckpaugh, Lewis	Tipton	502
Spiegel, Wm. H.	Fort Wayne	630
Stahlhuth, Minnie	Columbus	52
Stalker, Elmer E.	Charlestown	631
Stark, O. B.	Shelburn	143
Stauffer, W. A.	Elkhart	51
Stevens, Louis M.	Muncie	266
Stockdell, Catherine	New Albany	330
Stone, Harry B.	Fort Wayne	640
Stork, Emma	Holland	193
Stout, Walter Alfred	Indianapolis	619
Stout, C. Edwin	Silver Lake	164
Stout, Carl A.	Bluffton	224
Stoute, Will A.	Bloomington	367

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Swayzee, Chas. E.....	Forest	19A
Talbott, William E.....	Bowling Green	337
Tate, Charles E.....	Sullivan	23
Taulman, Webster	Corydon	666
Taylor, Wilbur C.....	Ambia	179
Thacker, Howard T.....	Evansville	737
Thomson, Chas. W.....	Flora	587
Thompson, Paul E.....	Evansville	730
Thorn, Fred	Terre Haute	754
Trippet, Edith Kightly	Princeton	279
Tucker, George S.....	New Albany	114
Tyer, M. Luther	Fincastle	175
Ulmer, Leslie J.....	Kokomo	647
Ury, Julian J.....	Center Point	537
Van De Vort, James D.....	Scottsburg	331
Van Loon, R. S.....	Anderson	287
Van Lue, W. Arthur.....	Shelbyville	713
Van Rie, Leo P.....	Mishawaka	672
Wagener, Edward F.....	Indianapolis	716
Wakeman, Leroy B.....	North Judson	682
Walk, Catherine	Fredericksburg	34
Wall, Henry O.....	Noblesville	47
Wall, Claude D.....	Elkhart	612
Walters, Chester F.....	Battle Ground	10A
Walter, Flora M.....	Lawrenceburg	81
Waltman, Caroline L.....	Dunkirk	207
Ward, Frank J.....	Otterbein	806
Watson, Cortez M.....	Martinsville	373
Weaver, Edward L.....	Logansport	363
Weaver, John H.....	Indianapolis	648
Welch, Clarence C.....	Indianapolis	233
Wetzel, Frank J.....	Indianapolis	93
Wiesjalm, William Herman	Wanatah	757
Williams, Abbott	Indianapolis	285
Williams, Glenn S.....	North Manchester	773
Willan, Ira C.....	Morgantown	508
Williams, George D.....	Goodland	65
Williamson, Claude Roy	Morocco	801
Williamson, Elmer E.....	Marshall	766
Wilson, M. D.....	Indianapolis	116
Wilt, Harry Lowell	Portland	552
Wrinborough, Geo. K.....	Lebanon	798
Winsett, Harry G.....	Richmond	99
Whetzel, Paul D.....	Greenfield	756
White, Francis A.....	Indianapolis	281
Whitley, James B.....	Muncie	768
Wolfe, David Albert	Ligonier	203
Wolfgang, Lizzie	Evansville	79
Wolpert, L. J.....	Elizabeth	112

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Wright, Clifton E.....	Sims	273
Wytttenbach, Florence C.....	Evansville	18
York, Arthur R.....	Cloverdale	681
Young, Garth Bernard.....	Frankfort	614
Zahrn, William F.....	Michigan City	210
Zimmerman, Floyd Velpo	Silver Lake	97
Zimmerman, Mrs. A.....	Indianapolis	115

NON-RESIDENT REGISTERED ASSISTANT PHARMACISTS

TO WHOM CERTIFICATES WERE ISSUED IN 1907.

ALPHABETICALLY ARRANGED.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Anderson, Harmon	Mt. Vernon, Ohio	192
Ashby, Lawrence	Stratford, Texas	724
Barker, J. C.....	Spokane, Wash.....	702
Brown, Philip W.....	Patoka, Ill.....	
Claypool, Walter	Urbana, Ill.....	82
Crandall, John K.....	Paris, Ill.....	732
Frammis, Luiji	Chicago, Ill.....	632
Fulenwider, John Wilburn.....	Jonesboro, Ill.....	727
Harding, Norris H.....	Pittsburg, Pa.....	310
Hill, Arthur P.....	Detroit, Mich.....	687
Holly, Millard B.....	Tacoma, Wash.....	639
Jackman, Merlin R.....	Sturgis, Mich.....	200
Kincaid, Geo. E. C.....	Eaton, Ohio	651
Laird, Wm. J.....	Good Hope, Ill.....	742
Lawrence, Victor E.....	Chicago, Ill.....	40
Lawrence, Roy V.....	Montgomery, Mich.....	695
Livingston, R. C.....	Denver, Colo.....	
Loertz, Edward C.....	Detroit, Mich.....	374
Lyons, Geo. W.....	Chrisman, Ill.....	
McCargar, Guy Landis.....	Buffalo, N. Y.....	539
Mann, Edmond	Denver, Colo.....	711
Moyer, Harry T.....	Chicago, Ill.....	107
Northam, Fred L.....	Kalamazoo, Mich.....	246
Pearson, W. A.....	Philadelphia, Pa.....	516
Peek, Everett J.....	Palmyra, Ill.....	599
Ramsey, J. Harley.....	St. Francisville, Ill.....	829
Roush, Samuel Preston	Danville, Ill.....	656
Schmidt, Julius H.....	Chicago, Ill.....	615
Shultis, Charles	Brooklyn, Mich.....	398
Tyrel, George Andrews.....	Redlands, Cal.....	21
Van Alstine, Wm. H.....	Collinwood, Ohio	321
Wingard, Charles Arthur.....	Montpelier	688

REGISTERED PHARMACISTS

ARRANGED BY COUNTIES ALPHABETICALLY.

ADAMS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Atwood, Lida I.....	Geneva	414
Atwood, Merrill T.....	Geneva	151
Anderson, John A.....	Geneva	1028
Aspy, Hiram M.....	Geneva	1741
Blackburn, Page	Decatur	1045
Callow, Horace F.....	Decatur	1641
Craig, John W.....	Berne	257
Deitsch, F. C.....	Geneva	1027
Deitsch, Jacob W.....	Geneva	835
Falk, John S.....	Decatur	3305
Fulk, Louis P.....	Decatur	5372
Holthouse, John B.....	Decatur	1643
Hoffman, Peter	Linn Grove	368
Hocker, Joseph	Monroe	929
Hener, Fred H.....	Decatur	1642
Gottschalk, Andrew	Berne	405
Miller, A. J.....	Geneva	1740
Nachtrieb, William A.....	Decatur	641
Porter, Charles Dorwin	Geneva	1029
Rice, Louis M.....	Decatur	5193
Stengel, Christian	Berne	256
Smith, Benj. J.....	Decatur	1693
Shaefer, Fred K.....	Berne	407
Yager, Leo, Jr.....	Decatur	1648
Yager, Louis P.....	Decatur	2442

ALLEN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Albersmeyer, Christian H.....	Fort Wayne	3710
Bears, Maybelle S.....	Fort Wayne	5482
Bell, Herman A.....	Fort Wayne	5162
Benninghoff, William Franklin.....	Fort Wayne	5151
Benke, Arthur	Fort Wayne	2942
Benton, D. L.....	Fort Wayne	2127
Beverforden, H. F.....	Fort Wayne	1863
Bill, Herman	Fort Wayne	1393
Bill, Jacob	Fort Wayne	1392

ALLEN COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brink, Clem J.....	Fort Wayne	2044
Brink, John J.....	Fort Wayne	2043
Carter, Edward C.....	Fort Wayne	361
Christen, Harry W.....	Fort Wayne	1782
Clapesattle, G. A.....	Fort Wayne	3410
Conden, Reynolds	Fort Wayne	5155
Cutshaw, Jessie May.....	Arcola	1711
Cutshaw, Geo. W.....	Arcola	1712
Detzer, A. J.....	Fort Wayne	3014
Detzer, Martin	Fort Wayne	3130
Diebold, Henry A.....	Fort Wayne	2339
Dittoe, Vincent A.....	Fort Wayne	2341
Dreier, William H.....	Fort Wayne	3655
Emanuel, Miss	Fort Wayne	3287
Epple, William F.....	Fort Wayne	366
Foellinger, Adolph	Fort Wayne	2344
Freese, Chas. F.....	Fort Wayne	2150
Friedmann, Chas. W.....	Fort Wayne	2256
Fuelling, Louis F.....	Fort Wayne	643
Garwood, John E.....	Fort Wayne	949
Geary, John K.....	Fort Wayne	3202
Gerberding, R. E.....	Fort Wayne	3801
Gocke, August C.....	Fort Wayne	2944
Granneman, H. C.....	Fort Wayne	1715
Gross, William Otto.....	Fort Wayne	2151
Hale, Selden B.....	Fort Wayne	2696
Harber, August A.....	Fort Wayne	1349
Hartman, George W.....	Fort Wayne	5112
Heinrich, John R.....	Fort Wayne	3592
Heyman, Edward A.....	Fort Wayne	1727
Hoham, F. D.....	Fort Wayne	1421
Hoham, Latta W.....	Fort Wayne	1420
Hutzell, Joseph C.....	Fort Wayne	3086
Jackson, John M.....	Monroeville	3261
Kaiser, Wm. C.....	Fort Wayne	2717
Kappel, John H.....	Fort Wayne	2274
Keller, Andrew J.....	Fort Wayne	681
Koehn, August Wm.....	Fort Wayne	1913
Kramer, Louis A.....	Fort Wayne	3286
La Master, George Washington.....	Fort Wayne	3416
Lepper, Charles O.....	Fort Wayne	3536
Lepper, Anna C.....	Fort Wayne	3538
Lindeman, Fred H.....	Fort Wayne	2607
Loesch, Geo. H.....	Fort Wayne	842
Manth, Albert W. F.....	Fort Wayne	3045
Meinzen, Fred W.....	Fort Wayne	1898
Meinzen, H. W.....	Fort Wayne	1897

ALLEN COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Mertz, William	Fort Wayne	1748
Mertz, Edward L.....	Fort Wayne	1747
Michael, Jno. B.....	Fort Wayne	3828
Michaelin, Daniel F.....	Fort Wayne	5220
Miller, G. T.....	Fort Wayne	3550
Miller, Henry A.....	Fort Wayne	2985
Miller, Frederick J.....	Fort Wayne	3763
Miller, Edward H.....	Fort Wayne	5203
Miller, Frederick W.....	Fort Wayne	5132
Moellering, William L.....	Fort Wayne	2910
Moellering, Chas. B.....	Fort Wayne	1784
Mordhurst, H. W.....	Fort Wayne	1985
Morrison, James Madison.....	Fort Wayne	5284
Neufer, John M.....	Fort Wayne	3556
Niebergael, Chas. A.....	Fort Wayne	2171
Niswonger, Henry W.....	Fort Wayne	2506
Noll, Benedict R.....	Fort Wayne	2464
Noll, Albert B. J.....	Fort Wayne	2465
Noll, Wm. H.....	Fort Wayne	2466
Nussbaum, Jos.....	Fort Wayne	3471
Ogle, John J.....	Fort Wayne	3476
Pellens, Joseph B.....	Fort Wayne	2996
Polster, Arwid	Fort Wayne	461
Ranke, Wm. F.....	Fort Wayne	2149
Rastetter, Carl L.....	Fort Wayne	1601
Reeder, Granville A.....	Harlan	2139
Regedanz, Chas. F.....	Fort Wayne	533
Rehling, Charles F.....	Fort Wayne	365
Rhoads, Oscar S.....	Fort Wayne	1835
Ringwalt, Elza O.....	Fort Wayne	5034
Schannep, J. A.....	Hoagland	3468
Scheele, Martin F.....	Fort Wayne	1959
Schmidt, Louis W.....	Fort Wayne	3762
Schroeder, Louis S. C.....	Fort Wayne	2425
Schultz, William H.....	Fort Wayne	3890
Schwelker, Henry F.....	Fort Wayne	3785
Seibold, Henry J.....	Fort Wayne	3849
Shinard, Earl C.....	Fort Wayne	5287
Sigl, Joseph A.....	Fort Wayne	3224
Soest, Miss Edith	Fort Wayne	5306
Soest, Henry W.....	Fort Wayne	1862
Soest, Louis S.....	Fort Wayne	1864
Stellhorn, Fred William.....	Fort Wayne	3214
Stover, Geo. F.....	Fort Wayne	1141
Sweany, William O.....	Monroeville	1113
Sweany, Willis E.....	Monroeville	2610
Tegtmeyer, H. W.....	Fort Wayne	1889
Van Sweringer, Garrette	Fort Wayne	2943

ALLEN COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Waltemath, Wm. L.....	Fort Wayne	3048
Weber, Robert	Fort Wayne	3917
Weihe, Emil	Fort Wayne	1322
Wenzler, John C.....	Fort Wayne	841
Wilken, John H.....	Fort Wayne	2424
Woodworth, Chas. B.....	Fort Wayne	1717
Woodworth, Benj. S.....	Fort Wayne	1714
Yerian, Clyde E.....	Fort Wayne	5338
Zimmermann, Martin F. W.....	Fort Wayne	2345
Zimmermann, John	Fort Wayne	2362

BARTHOLOMEW COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adams, Clarence W.....	Columbus	2747
Boner, John W.....	Elizabethtown	3443
Brier, S. W.....	Hope	5432
Chandler, Seneca Eugene.....	Hope	1461
Conner, Fred I.....	Columbus	5453
Fehring, August H.....	Columbus	1477
Fouts, Earl	Columbus	1767
Gotsch, Otto Ernst	Columbus	5351
Green, Edward M.....	Columbus	2230
Green, J. W.....	Taylorsville	2405
Hartzell, Wm. N.....	Hope	2588
Hauser, Zachary	Columbus	2541
Holmes, H. M.....	Columbus	2229
Lay, Francis T.....	Columbus	5001
McKnight, Noble E.....	Columbus	5429
Mahaffey, James	Hartsville	3114
Mennett, Overton H.....	Columbus	2455
Morrison, Charles	Hartsville	2591
Morrison, James H.....	Hartsville	2590
Noblitt, T. J.....	Columbus	455
Otto, Theo. E.....	Columbus	1366
Parker, B. W.....	Columbus	2540
Redd, James M.....	Grammer	5286
Scott, W. H.....	Newbern	2379
Stahlhuth, Ernst H. W.....	Columbus	616
Stevens, Victor E.....	Hope	535
Stapp, Simeon	Hope	1463
Stapp, Frank	Hope	1464
Winn, Frank C.....	Taylorsville	2260

BENTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Beaty, G. S.....	Freeland Park	2857
Burns, Lawrence	Otterbein	1156
Crawford, Chas.....	Ambia	3085
Fall, C. W.....	Fowler	3798
Hagenbuck, A. W.....	Fowler	470
Hunter, Abram F.....	Raub	494
Hunter, Charles F.....	Raub	495
Hutson, W. B.....	Fowler	1925
James, George B.....	Boswell	2643
Jones, George W.....	Fowler	858
Jones, Eldan F.....	Fowler	859
Ladd, Ralph Brenton.....	Oxford	5297
Larr, David W., Jr.....	Otterbein	3577
Lenark, Ovid B.....	Oxford	2654
Menefee, George	Ambia	3851
Menefee, Will D.....	Ambia	3852
Miller, Harry V.....	Oxford	3167
Payne, James W.....	Fowler	853
Roberts, Edward J.....	Earl Park	1744
Rockwood, B. O.....	Boswell	872
Rodman, James W.....	Fowler	469
Savage, John A.....	Oxford	1036
Scott, Clinton A.....	Oxford	3570
Shepard, Charles	Raub	200
Simpkins, W. D.....	Boswell	418
Talbott, Daniel M.....	Earl Park	199
Weaver, C. H.....	Boswell	1126
Wilkins, Oscar B.....	Oxford	2089
Ward, Frank J.....	Otterbein	5411

BLACKFORD COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Alexander, V. H.....	Roll	1231
Anderson, Orlando	Hartford City	2360
Beatty, William S.....	Hartford City	1196
Caldwell, Ares M.....	Hartford City	1565
Cronin, Timothy J.....	Hartford City	2359
Emshwiller, Daise Mae.....	Montpelier	5211
Emshwiller, John	Montpelier	2071
Emshwiller, Robert M.....	Montpelier	3363
Krauss, William R.....	Hartford City	2662
Maddox, Harry Rupert.....	Montpelier	5183
Maddox, Leander E.....	Montpelier	2137
Marine, Pearl Dillovan	Hartford City	5463
Scott, Ameinks Pintis	Hartford City	5216

BLACKFORD COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Shewalter, Charles E.....	Montpelier	5464
Shinn, Elmer E.....	Hartford City	2661
Sowers, Jacob J.....	Hartford City	2829
Van Winkle, T. P.....	Hartford City	2830

BOONE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Allen, Grafton C.....	Lebanon	3918
Bell, Andrew M.....	Lebanon	2115
Bradshaw, Thomas E.....	Thorntown	130
Broshar, John E.....	Lebanon	3693
Burk, William C.....	Thorntown	1039
Bynum, Frank P.....	Lebanon	2898
Campbell, Millard F.....	Lebanon	1570
Cason, John O.....	Lebanon	3185
Coombs, Fred	Lebanon	2899
Coulson, George	Thorntown	1786
Davis, Guy Foster	Lebanon	5032
Dickson, Robert N.....	Jamestown	2016
Etter, Robert N.....	Lebanon	2900
Fox, Joseph M.....	Lebanon	2912
Hall, J. F.....	Jamestown	1416
Jones, Alfred B.....	Lebanon	551
Jones, Daniel Milford.....	Lebanon	5126
Joseph, William	Advance	1208
Laughner, Bert	Whitestown	2397
Laughner, A. M.....	Whitestown	2396
Long, Milton C.....	Lebanon	854
Masters, Alva T.....	Lebanon	1580
Mills, T. P.....	Zionsville	2977
Norwood, Harry G.....	Lebanon	857
Pavey, Benjamin F.....	Lebanon	2138
Shelburne, Jasper C.....	Zionsville	2714
Shelburne, Samuel R.....	Zionsville	2715
Staley, James P.....	Lebanon	1000
Staton, M. F.....	Thorntown	1040
Stevenson, Charles	Jamestown	3654
Van Pelt, J. H.....	Thorntown	432
Winters, Mrs. Annie L.....	Lebanon	3831

BROWN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Genolin, Charles	Nashville	5491
Hill, Sherman D.....	Sparksville	3898

CARROLL COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Beggs, Otto S.....	Camden	1522
Colvin, H. B.....	Flora	1432
Colvin, Mary E.....	Flora	1428
Eiler, Charles R.....	Flora	1934
Elless, Harvey F.....	Delphi	924
Flora, Albert A.....	Flora	2338
Hindman, William T.....	Burlington	3695
Knapp, Warren Melvin	Flora	2337
Margowski, George L.....	Delphi	1482
Margowski, William S.....	Delphi	1483
Miller, David	Bringinghurst	3393
Murphy, Mitchell M.....	Delphi	2254
Nobes, Chas. E.....	Flora	928
Orr, Irving H.....	Delphi	210
Schermerhorn, Dr. J. C.....	Flora	566
Shanks, Frank H.....	Deer Creek	1152
Snyder, Ebenezer Justine	Camden	3382
Stonebraker, Pratt W.....	Burlington	264
Tesh, Ulysses E.....	Camden	2264
Tidrick, Rollin S.....	Bringinghurst	1138
Tidrick, Reuben R.....	Bringinghurst	1139
Tidrick, Ruskin O.....	Bringinghurst	3254
Todd, Ira L.....	Bringinghurst	5180
Van Gundy, Perry	Rockfield	2781
Wertz, Clyde S.....	Delphi	5443

CASS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Agness, Rudolph B.....	Royal Center	827
Brennan, Mrs. J. F.....	Logansport	1636
Brennan, John F.....	Logansport	1635
Bringinghurst, Alfred T.....	Logansport	50
Brown, Ernest Ames.....	Lafayette	553
Buchanan, Rea	Logansport	3863
Busjohn, John J.....	Logansport	2597
Clem, Jacob B.....	Logansport	5040
Closson, Seymour M.....	Logansport	2132
Closson, Homer C.....	Logansport	2131
Cost, John W.....	Young America	2191
Coulson, John F.....	Logansport	70
Donaldson, Frank E.....	Chalmers	1905
Dutchess, Edith A.....	Walton	2798
Dutchess, Charles P.....	Walton	2797
Dutchess, Owen A.....	Walton	3438
Engler, Owen	Walton	3779
Hattery, Hiram D.....	Logansport	1253

CASS COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hanawatt, Valentine C.....	Logansport	1295
Hipskind, Adam M.....	Logansport	3406
Hoffman, George William	Logansport	2752
Grigsby, J. M.....	Logansport	3480
Keesling, Benjamin F.....	Logansport	412
Kimbrough, James M.....	Logansport	5266
Kinney, Joseph E.....	Logansport	64
Kistler, Carl G.....	Royal Center	2130
Klinsick, William	Logansport	1401
Loop, Z. U.....	Galveston	269
Marshall, Geo. A.....	Logansport	1900
Means, Oscar A.....	Logansport	1751
Metheny, J. M.....	New Waverly	1424
Poit, Henry W.....	Logansport	2614
Porter, William H.....	Logansport	2486
Rea, George A.....	Royal Center	277
Rockwood, John H.....	Logansport	1758
Schneider, John W.....	Logansport	2598
Smith, Hugh	Logansport	1117
Smith, Asa E.....	Logansport	5225
Stoll, Otto H.....	Logansport	1016
Sullivan, James H.....	Royal Center	276
Thomas, James L.....	Royal Center	2010
Tritt, Harry C.....	Logansport	3717
Turman, Lee	Logansport	2192
Vurpillat, Victor J.....	Logansport	866
Zinninger, Herman L.....	Logansport	3807

CLARK COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adair, Samuel Lowery, Jr.....	New Washington	76
Adair, Samuel Lowery, Sr.....	New Washington	77
Adair, Mollie E.....	Bethlehem	478
Bottorff, Charles M.....	Charlestown	3172
Dobbins, Frank G.....	Jeffersonville	2387
Bottorff, Katie P.....	Charlestown	3171
Doherty, Martin F.....	Jeffersonville	1609
Doolittle, Benson	Jeffersonville	242
Graham, J. A.....	Jeffersonville	1480
Hoover, Philip L.....	Carlisle	1501
Hoover, John W.....	Jeffersonville	752
Kincaid, Duncan E.....	Jeffersonville	244
Kincaid, George P.....	Jeffersonville	243
Loomis, Herbert	Jeffersonville	13
Loomis, Jno. C.....	Jeffersonville	12
Mason, Fred A.....	Jeffersonville	5063

CLARK COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Nickles, M. F.....	Sellersburg	5074
Parks, Floyd	Jeffersonville	48
Parks, Lyman	Jeffersonville	47
Perry, Thomas W.....	Jeffersonville	1582
Pfau, Wm. C.....	Jeffersonville	2094
Reynolds, James M.....	Memphis	3232
Schwanninger, W. J.....	Jeffersonville	2851
Schwanninger, C. A.....	Jeffersonville	1581
Stalker, J. B.....	Borden	38
Stalker, Benjamin F.....	Borden	37
Stalker, Charles Homer.....	Borden	1680
Tyler, William T.....	Utica	1173
Watson, George G.....	Jeffersonville	245
Zurner, Joseph	Jeffersonville	3821

CLAY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bolin, Esau L.....	Hoosierville	2774
Boothe, N. A.....	Brazil	2754
Bourne, Carl E.....	Coalmont	5182
Burns, James L.....	Brazil	2403
Chamberlain, Dr. Wm. L.....	Poland	1445
Crooks, Joseph	Brazil	3070
Cummins, Charles A.....	Clay City	3553
Danhour, J. W.....	Clay City	1008
Duncan, Walter C.....	Clay City	2203
Ferrell, J. G.....	Brazil	5008
Elliott, John T.....	Ashersville	1761
Englehart, Theodore W.....	Brazil	1429
Gantz, Dr. R.....	Saline City	1499
Gillespie, Chas. E.....	Staunton	3340
Herr, Simon	Brazil	3021
Horner, Frank A.....	Brazil	2119
Howes, Jarvis M.....	Bowling Green	1583
Jett, Pierre T.....	Clay City	1893
Kellar, Charles F.....	Brazil	5474
Miller, Jesse A.....	Centerpoint	3339
Morton, Daniel W. V.....	Knightsville	2383
Neidlinger, Henry L.....	Brazil	3824
Rayne, Wm. H.....	Ashersville	2987
Roach, Patrick Anthony	Brazil	173
Rohrig, George	Harmony	2331
Staggs, Edgar A.....	Cory	100
Thornton, Felix G.....	Knightsville	2332
Throop, James H.....	Carbon	2745
Throop, George E.....	Carbon	2746
Weinland, Harry E.....	Brazil	1843
Wiltshire, Roland A.....	Gwynneville	320

CLINTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ashman, Chas. S.....	Frankfort	1332
Aughe, Chas. G.....	Frankfort	5169
Campbell, Horace F.....	Frankfort	1981
Cohn, Valentine F.....	Frankfort	1979
Cook, Henry C.....	Mulberry	1907
Cook, Rosa	Mulberry	1906
Coon, William H.....	Colfax	2648
Cullom, Geo. C.....	Frankfort	3466
Davis, George	Colfax	392
Ghent, Ira K.....	Frankfort	2998
Given, John P.....	Frankfort	1982
Grover, Lizzie M.....	Frankfort	1977
Hammond, Otto M.....	Frankfort	1980
Hayse, Edward J.....	Frankfort	3321
Heaton, Robert W.....	Scircleville	460
Kutz, George M., Jr.....	Kirklin	124
Kutz, Samuel L.....	Kirklin	123
Laird, A. A.....	Frankfort	2973
McKown, Walter C.....	Frankfort	5205
Mauch, Martin J.....	Frankfort	484
Merrill, E. B.....	Frankfort	1728
Miller, M. E.....	Michigantown	1779
Norris, George B.....	Frankfort	1034
Norris, William C.....	Frankfort	817
Pence, Samuel R.....	Rossville	2766
Ramsey, William R.....	Mulberry	1988
Reed, Mrs. Lora B.....	Frankfort	391
Roberts, A. A.....	Frankfort	1585
Ruch, S. W. M.....	Frankfort	5161
Searcy, Hiram	Kirklin	1603
Temple, Elonzo V.....	Frankfort	2581
Ticen, William M.....	Colfax	1588

CRAWFORD COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Elsby, Samuel J.....	English	583
Gobbel, Fred R.....	English	2404
Gregory, William E.....	Marengo	3334
Miller, Jno. M.....	English	2816
Rawlings, Charles W.....	Milltown	2279
Roberts, Alexander S.....	Alton	1026
Roberts, Harry	English	2123
Patton, J. W.....	English	3627
Setser, Henry H.....	Leavenworth	1801
Summers, Charles D.....	Marengo	3335
Walts, Scott M.....	Milltown	241

DAVIESS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Betts, Wm. C.....	Washington	2707
Bunch, Cora A.....	Plainville	156
Bunch, William H.....	Plainville	181
Danner, Joel F.....	Elnora	1965
Danner, Rufus J.....	Elnora	1966
Davis, Willis S.....	Washington	5003
Dearmin, W. T.....	Odon	1540
Gantz, Daniel	Odon	2085
Godwin, Jesse	Alfordsville	3452
Hunemeier, Louis F.....	Washington	2099
Jackson, Wallace L.....	Washington	968
Jones, J. N.....	Washington	2853
Lindeman, Henry J.....	Washington	2852
McPherson, S. L.....	Montgomery	3509
McPherson, Morton	Montgomery	3896
Ober, Joseph A.....	Washington	3672
Penninger, William H.....	Odon	2681
Ross, William Allen	Washington	2869
Schmidt, Arthur F.....	Washington	5164
Smith, Frank	Washington	1236
Smoot, D. B.....	Washington	3484
Smoot, William P.....	Washington	3483
Stoy, W. L.....	Odon	1823
Sum, Aloysius M.....	Washington	5165
Thompson, John	Washington	1736
Van Trees, Warren	Washington	1861
Willeford, George W.....	Washington	3520
Williams, Robt. B.....	Odon	1418
Yazel, Archibald	Elnora	3099

DEARBORN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Deitrich, Albert H.....	Lawrenceburg	3639
Ewing, Emma	Dillsboro	1470
Ewing, W. J.....	Dillsboro	1469
Fitch, Charles William	Lawrenceburg	5341
Jaquith, Frank Edwin.....	Lawrenceburg	3889
Jennings, Thomas A.....	Moore's Hill	914
Kennedy, Mary	Lawrenceburg	5252
Kern, Rudolph	West Harrison	3877
Leibecke, Charles	Aurora	383
Lommel, Arthur F.....	Lawrenceburg	5247
McCullough, William Theodore.....	Dillsboro	3638
Marshall, Hubert J.....	Aurora	1147
Marshall, Charles C.....	Aurora	1146
Miller, Chester R.....	Lawrenceburg	782

DEARBORN COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Olcott, Charles W.....	Aurora	521
Rains, General G.....	Cochran	1738
Rains, Rosa	Cochran	1739
Riddell, James A.....	Aurora	259
Rieman, Louis C.....	Aurora	644
Ulrich, John	Aurora	2720
Walter, Rudolph	Lawrenceburg	1263

DECATUR COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Alexander, John T.....	Greensburg	3016
Bailey, Edwin H.....	Greensburg	5219
Bailey, Hassen E.....	St. Paul	2975
Ballard, D. J.....	St. Paul	3178
Batterton, Frank	Greensburg	725
Batterton, John H.....	Greensburg	726
Batterton, Edwin D.....	Greensburg	5201
Bonner, Samuel A.....	Greensburg	605
Campbell, R. M.....	West Point	721
Donnell, Frank L.....	Greensburg	5166
Hazelrigg, Mack M.....	Adams	2957
Hazelrigg, D. W.....	Adams	2956
Henry, Frank Mills	Greensburg	3018
Hite, John A.....	Clarksburg	1975
Hunter, Herbert C.....	Greensburg	5421
Jenkins, Benjamin	St. Paul	1010
Johnston, Walter W.....	Greensburg	5025
McCullough, William F.....	Westport	2433
Manuel, Frank	Westport	3737
Moss, Joseph S.....	Greensburg	1097
Rogers, Stephen F.....	Greensburg	920
Shumm, A. C.....	Clarksburg	1974
Stewart, Maurice G.....	Westport	3181
St. John, Robert	Greensburg	606
Talbott, Abram H.....	Greensburg	1096
Trimble, Hester Ann	St. Paul	3451
Wright, John Loraine	Greensburg	3760

DEKALB COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Abram, B. Robert.....	Butler	5248
Beidler, Solomon W.....	Waterloo	3834
Bevier, Effie A.....	Waterloo	2631
Bevier, Frank	Waterloo	2629
Brunson, Vincent C.....	Newville	2470

DEKALB COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Blair, D. J.....	Newville	3652
Camp, Chas. W.....	Garrett	1281
Campbell, James D.....	Waterloo	1025
Dailey, A. Byron.....	Waterloo	2577
Dailey, Frank W.....	Waterloo	2586
Darby, Hadsell Byron	Waterloo	2589
Davenport, F. E.....	Auburn	1573
Dibert, Walter S.....	Garrett	952
Dibert, J. H.....	Garrett	946
Dunlap, Marshall H.....	Summit	3641
Geddes, Geo. W.....	Butler	2765
Halter, A. F.....	Garrett	1912
Halter, Mrs. A. F.....	Garrett	1911
Harding, L. C.....	Butler	2764
Hathaway, Henry C.....	St. Joe	2348
Hill, Julius	Garrett	785
Kettering, W. Clayton	Auburn	177
Layman, William	Auburn	763
Le Fevre, Jay M.....	Garrett	3829
Linegar, John M.....	Fairfield	1584
McCord, Howard B.....	Auburn	176
Mager, George Edward	Garrett	5366
Mayfield, R. Frank.....	Auburn	5245
Millikin, Isaac B.....	Garrett	951
Milliman, Harry	St. Joe	5053
Patterson, John S.....	Garrett	1665
Patterson, W. C.....	St. Joe	2355
Patterson, Clarence A.....	St. Joe	2354
Phillips, Chas. F.....	Butler	2080
Phillips, H. M.....	Auburn	762
Provines, John A.....	Spencerville	2456
Provines, John A.....	Spencerville	5382
Staman, Ashton	Auburn	5026
Stoehr, John J.....	Garrett	747
Stone, Sam G.....	Butler	1664
Van Vorhies, Melvin H.....	Waterloo	2630

DELAWARE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adelsperger, Bernard	Muncie	5477
Andrews, Arthur F.....	Muncie	2622
Andrews, Walter M.....	Muncie	2497
Barrett, George T.....	Cowan	128
Barrett, Thomas F.....	Albany	3071
Bowles, Homer E.....	Muncie	3249
Campbell, David Porter.....	Muncie	1005

DELAWARE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Campbell, Benjamin N.....	Muncie	1004
Daniels, Harley	Eaton	3585
Durham, James E.....	Muncie..	2182
Edwards, Henry C.....	Muncie	492
Everode, Harry C.....	Muncie	5486
Fifer, George	Muncie	3247
Fletcher, Charles W.....	Daleville	3000
Fraizer, A. J.....	Muncie	313
Galliher, Edward Moore	Muncie	2621
Gordon, Matthew H.....	Muncie	1047
Greer, Levi H.....	Yorktown	771
Greer, J. Fenimore	Yorktown	5428
Gregg, Sarah L.....	Yorktown	3402
Gregg, Elijah H.....	Yorktown	3403
Helm, Arthur C.....	Muncie	3019
Hill, W. E.....	Muncie	117
Hook, Hugh A.....	Muncie	5471
Ice, Harry H.....	Muncie	2889
Jackson, H. Marsh	Muncie	2496
Largent, Benjamin P.....	Muncie	3869
Lewis, E. L.....	Albany	147
McDougal, William E.....	Muncie	2744
Markle, Saml. E.....	Gaston	1568
Mitchell, Otto De Roy.....	Eaton	5160
Nelson, George L.....	Muncie	482
Nichols, Walter C.....	Muncie	2180
Prutzman, Chas. O.....	Muncie	2623
Rinewalt, Howard	Muncie	116
Scott, Walter Greely	Muncie	1076
Shewmaker, Walter	Muncie	574
Shinkle, Charles R.....	Muncie	3601
Shinkle, Florimond Livingston.....	Muncie	3600
Siefert, William H.....	Muncie	1001
Silverburg, Victor E.....	Muncie	587
Stevens, William P.....	Muncie	2181
Stewart, Marion	Muncie	480
Stewart, William F.....	Muncie	3554
Stick, Stephen A. D.....	Albany	2178
Stover, James Carleton.....	Muncie	481
Suman, Geo. O.....	Daleville	2509
Teeter, Wade B.....	Muncie	5380
Thornburg, Chas. E.....	Muncie	573
Thornburg, John H.....	Muncie	646
Weinke, Herman J.....	Muncie	5376
Whinerey, James W.....	Muncie	2474
Whinerey, Edwin A.....	Muncie	5444
Wyatt, Charles G.....	Gaston	2233

DUBOIS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brundick, Ernest R.....	Huntingburg	1935
Enlow, John W.....	Birdseye	2492
Flick, A. W.....	Jasper	5167
Friedman, Martin	Jasper	52
Gray, Jno. F.....	Ireland	770
Hollowell, P. J.....	Birdseye	1795
Mehringer, Joseph A.....	Jasper	53
Miller, A. H., Jr.....	Huntingburg	898
Miller, Elizabeth H.....	Huntingburg	3458
Schwartz, C. W.....	Huntingburg	527
Smith, Emanuel A.....	Birdseye	3341
Stork, Dr. H. W.....	Holland	2920
Wollenmann, Dr. Aloys G.....	Ferdinand	3389

ELKHART COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ackers, Rose C.....	Elkhart	2799
Ackers, Charles A.....	Elkhart	2800
Barnard, Enola	Millersburg	2727
Barnard, William B.....	Millersburg	2050
Beeson, Otis J.....	Goshen	567
Berkey, William H.....	Elkhart	545
Bickel, John A.....	Goshen	2471
Bostwick, Edward W.....	Elkhart	903
Bradford, Miles P.....	Goshen	513
Burkley, Oscar J.....	Goshen	1133
Castetler, Clyde J.....	Goshen	3211
Chipman, Edward D.....	Goshen	3231
Clay, William H.....	Wakarusa	1182
Colwell, William M.....	Elkhart	3826
Congdon, Loren A.....	Bristol	304
Fell, Elmer B.....	Elkhart	822
Finehout, Edwin J.....	Elkhart	1520
Gampher, Frank S.....	Elkhart	295
Goldman, Royal F.....	Elkhart	684
Goldman, Frank J.....	Elkhart	683
Greiner, W. H.....	Vistula	945
Harshner, Darius L.....	Burkett	786
Hawks, Joe P.....	Goshen	2160
Hawks, Dwight H.....	Goshen	746
Hottel, Lynn S.....	Goshen	2694
Houseworth, Bert D.....	Elkhart	301
Houseworth, Allen H.....	Elkhart	300
Houseworth, John E.....	Elkhart	302
Jenner, Henry N.....	Goshen	514
Johnson, Christian W.....	Nappanee	691

ELKHART COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Kibbe, Edward	Elkhart	708
Knickerbocker, Clarence	Elkhart	627
Leonard, Charles H.	Elkhart	148
Luke, Eugene D.	Elkhart	5187
McCauley, S. G.	Elkhart	823
Martin, John F.	Elkhart	3173
Miller, Edward D.	Elkhart	3212
Munson, Tullie J.	Elkhart	840
Neill, Fred W.	New Paris	5243
Nusbaum, Payson L.	Middlebury	2841
Nusbaum, Joseph F.	Middlebury	2840
Reynolds, Robert A.	New Paris	5153
Rogers, Delos C.	Elkhart	1679
Root, William E.	Elkhart	3253
Rule, George W.	Goshen	1301
Smith, H. E.	Goshen	815
Stiles, Thomas P.	Millersburg	2873
Thomas, George A.	Elkhart	2472
Townsend, James W.	Elkhart	1659
Walters, J. S.	Nappanee	855
Walters, John H.	Nappanee	856
Werntz, David V.	Wakarusa	3544
Wilson, Minnie	Milford	834
Whitehead, Edward E.	Goshen	180
Wyman, S. L.	Elkhart	1572
Wyman, Willard Le Roy	Elkhart	5174

FAYETTE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Andrews, Albert M.	Connersville	757
Ashworth, James Lewis	Connersville	1622
Cain, Frank G.	Connersville	1305
Elliott, Orlando	Connersville	1744
Erb, Maynard M.	Connersville	2317
Ferris, Elmer E.	Connersville	1352
Green, Lewis Edward	Connersville	1855
Leadbetter, Frank S.	Connersville	1511
McKenna, Samuel O.	Connersville	1623
McKenna, Roy C.	Connersville	5028
Meek, Sylvester	Connersville	781
Moor, Chester E.	Orange	1555
Nungester, Harry A.	Connersville	5437
Perrin, Roscoe E.	Connersville	5203
Robinson, Sanford H.	Connersville	3112
Spicely, C. M.	Connersville	1373
Tyrrell, Alexander D.	Connersville	3797
Worsham, William Milton	Connersville	756

FLOYD COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Alexander, Stephen J.....	New Albany	808
Allen, Lewis W.....	New Albany	2958
Austin, Thomas E.....	New Albany	2805
Bader, Henry Frederick	New Albany	239
Bader, Oscar Otto	New Albany	238
Brigham, F. L.....	New Albany	3546
Callahan, Charles F.....	New Albany	1705
Conner, Nellie	New Albany	1136
Conner, Ernest	New Albany	1137
Crecelius, C. E.....	New Albany	2
Crosier, Frank	New Albany	143
Crosier, Scott	New Albany	3051
Day, William F.....	New Albany	237
Devol, Robert G.....	New Albany	1021
Dorsey, Charles B.....	New Albany	7
Falk, Otto H.....	New Albany	5213
Fitzgerald, Edwin H.....	New Albany	814
Geisler, P. H.....	New Albany	1287
Gwin, H. Wallace	New Albany	1286
Hoover, James A.....	New Albany	78
Hoover, Arthur K.....	New Albany	145
Hoover, Stanley S.....	New Albany	2672
Hopkins, H. F.....	New Albany	1020
Kannapell, Frank N.....	New Albany	828
Knoefel, Chas. D.....	New Albany	25
Knoefel, Bruno	New Albany	1
Knoefel, August F.....	New Albany	610
McClaren, John E.....	New Albany	142
McDonald, J. H. H.....	New Albany	5172
Mayes, E. G.....	New Albany	24
Mergell, George E.....	New Albany	75
Miller, Frank E.....	New Albany	415
Needham, Hugh J.....	New Albany	3351
Needham, Edgar A.....	New Albany	3352
Oppelt, Otto	New Albany	1481
Owen, Samuel H.....	New Albany	2689
Owen, Luella S.....	New Albany	3266
Owens, Ollie	New Albany	1787
Pierle, Eugene A.....	New Albany	27
Platt, John F.....	New Albany	3299
Roby, Oliver P.....	New Albany	3237
Rockenbach, E. C.....	New Albany	3
Sackett, Bruce C.....	New Albany	3149
Sackett, Ozem	New Albany	3148
Sloan, Geo. D.....	New Albany	18
Stalker, William H.....	New Albany	1285
Stein, Dr. Frank J.....	New Albany	2515

FLOYD COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Stockdell, Theodore	New Albany	26
Walker, Samuel P.	New Albany	226
Williams, W. R.	Greenville	479
Wright, James A.	Georgetown	118
Zugelhour, John A.	New Albany	79

FOUNTAIN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Basham, Rufus	Wallace	2955
Bellees, Johnnie	Wallace	2954
Bonebrake, James O.	Veedersburg	1213
Boor, A. M.	Veedersburg	488
Buckner, J. P.	Covington	378
Cade, John	Covington	2653
Cory, Gilbert L.	Covington	1062
Cory, Jeremiah M.	Kingman	1064
Cory, Claude E.	Kingman	1063
Graham, Geo. G.	Veedersburg	153
Haller, Charles C.	Attica	5381
Haller, Dan H.	Attica	532
Harbaugh, Horace Webb	Attica	3759
Hatton, Roy D.	Attica	2412
Hildebrandt, J. F.	Attica	1984
Moore, J. L.	Mellott	2220
Philpott, H. H.	Yeddo	1986
Reid, J. O.	Attica	1033
Reid, Earl L.	Attica	5138
Robinson, A. B.	Attica	1119
Robinson, Fred R.	Attica	1120
Robinson, C. F.	Attica	1118
Rolins, W. P.	Newtown	1940
Rolins, M.	Newtown	1939
Sanger, Hardy	Veedersburg	152
Scharf, H. T.	Hillsboro	1757
Steimbaugh, C. L.	Kingman	3479
Summers, Thomas A.	Hillsboro	1085
Walk, John E.	Fredericksburg	347
Wallace, D. H.	Veedersburg	487
Ward, Andrew J.	Veedersburg	1090

FRANKLIN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Carter, Calvin	Brookville	837
Cox, William	Rosedale	2756
Gifford, S. A.	Laurel	2667

FRANKLIN COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hermansdorfer, August	Brookville	614
Meyers, Kirby Clinton	Brookville	2059
Seal, Frank E.	Mt. Carmel	65
Sheppard, Freddy	Brookville	5454
West, James F.	Brookville	851

FULTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Biggs, William M.	Kewanna	5412
Dawson, Geo. V.	Rochester	1405
Felder, Louis W.	Fulton	1398
Fieser, Edward L.	Rochester	5051
Fitzgerald, W. L.	Rochester	984
Keith, G. P.	Rochester	2965
McClung, John Leigh	Rochester	1989
McPherson, Wm.	Kewanna	673
Mewby, Stephen M.	Rochester	3738
Richter, Wm. N.	Rochester	1404
Robbins, Arthur	Grass Creek	2102
Ruh, Alexander	Rochester	1397
Scott, Emory L.	Akron	813
Scott, Albert E.	Akron	2257
Shore, Perry M.	Rochester	394
Shore, Earle B.	Rochester	569
Slaybaugh, U. G.	Rochester	1402
Shipley, John B.	Disko	2193
Stearnes, Harvard	Bruce Lake	1743

GIBSON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Biggs, Floyd J.	Princeton	99
Biggs, Edwin T.	Princeton	5339
Bird, David P.	Princeton	39
Butler, Charles W.	Oakland City	2073
Craig, William F.	Princeton	3512
De Priest, A. B.	Hazelton	2294
Emmert, Mary A.	Haubstadt	284
Emmert, John A.	Haubstadt	283
Fleming, Nancy B.	Princeton	3291
Gram, Walter G.	Fort Branch	5265
Head, D. R.	Princeton	3434
Kightly, Chas.	Oakland City	1880
Lance, John T.	Princeton	2872
Lewis, Fred J.	Princeton	556
Lockhart, T. L.	Owensville	5224

GIBSON COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
McGregor, Geo. H.....	Somerville	1011
Mangrum, Carl	Princeton	5445
May, Harry G.....	Princeton	2574
Milburn, Herbert Author	Patoka	5318
Milburn, Felix O.....	Patoka	2813
Parrett, Fred R.....	Princeton	1535
Rigg, Sheridan	Princeton	1417
Runcie, Charles B.....	Fort Branch	1895
Schmidt, Louis	Spencer	699
Schellhase, F. W.....	Princeton	1708
Shoptaugh, M. E.....	Princeton	991
Sisson, Winfield S.	Hazleton	485
Sisson, Andrew C.....	Hazleton	5308
Smith, W. M.....	Princeton	2871
Spillman, Carl	Oakland City	5362
Strickland, Roy J.....	Owensville	3158
Strickland, H. L.....	Owensville	3159
Troutman, Othello B.....	Oakland City	107
Troutman, A. G.....	Oakland City	95
Wallace, Lemuel B.....	Francisco	3836

GRANT COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Agness, Benjamin F.....	Converse	472
Agness, Sylvester	Converse	805
Allen, Charles B.....	Marion	254
Ansley, Elmer J.....	Marion	2392
Anderson, John William	Matthews	5176
Balinger, John A.....	Marion	14
Barns, James M.....	Mier	685
Beasley, Wm. A.....	Fairmount	1009
Bruch, Calvin C.....	Marion	2166
Bruch, Walter L.....	Marion	1594
Byler, Christian	Marion	360
Conwell, L. V.....	Van Buren	1978
Conwell, N. Roy	Van Buren	5236
Cooper, Orla Franklin	Marion	2070
Cox, Oscar M.....	Marion	2583
Crumrine, Ira S. J.....	Landess	3880
Daniels, M. J.....	Sweetser	3088
Daniels, George	Marion	3087
Drake, Fred T.....	Van Buren	2194
Edwards, N. W.....	Fairmount	995
Edwards, Xen H.....	Fairmount	5407
Egbert, R. E.....	Marion	715
Fausler, Cassius W.....	Marion	996
Fisher, Samuel	Gas City	3892

GRANT COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Freel, John L.....	Marion	783
Gable, J. L.....	Marion	1604
Gardner, John G.....	Marion	5365
Hackett, Edward R.....	Marion	2407
Hildebrand, W. M.....	Marion	1763
Jones, John L.....	Fowlerton	1832
Klider, George M.....	Marion	833
Lamm, Leander D.....	Converse	473
Larkin, William J.....	Swayzee	1123
Lawshe, Claude H.....	Swayzee	5475
Leedy, A. W.....	Marion	1238
McDonough, Courtney B.....	Marion	5264
McPherson, James Thomas	Jonesboro	2539
Markle, William H.....	Rigdon	751
Mason, Elmer E.....	Marion	179
Mayberry, John	Gas City	3521
Miller, Craig	Marion	1415
Miller, William B.....	Marion	3235
Mossman, Wade H.....	Marion	5454
Negus, O. W.....	Marion	3459
O'Mara, Patrick H.....	Fairmount	497
Otto, A. Blaine	National Military Home...	5274
Overman, C. H.....	Marion	186
Pauley, B. Frank	Marion	5354
Rigdon, Frank H.....	Marion	66
Rothinghouse, Charles H.....	Jonesboro	1517
Rothinghouse, A. B.....	Jonesboro	1518
Rothinghouse, Fred	Gas City	1515
Ruff, John M.....	Marion	2395
Safford, Chas. M.....	Marion	2584
Saxon, John	Marion	2411
Shelly, Oliver G.....	Marion	208
Siddons, William E.....	Marion	2836
Siddons, Walter L.....	Marion	2762
Sims, William G.....	Swayzee	2222
Smethurst, Chas. S.....	Converse	471
Smiley, Frank	Matthews	2660
Smith, T. M.....	Upland	1694
Smith, Herbert B.....	Marion	5450
Sturrett, Walter K.....	Marion	2313
Stehle, Bernard E.....	Matthews	1765
Sturgis, Will C.....	National Military Home ..	2265
Sublette, John Hughes	Point Isabel	3631
Wetzel, Lewis O.....	Marion	869
Wiles, T. C.....	Marion	67
Williamson, George	Sweetser	1474
Williamson, Alva	Sweetser	1473
Wixson, Byron O.....	Marion	1304
Wytenbach, Claude	Fairmount	344

GREENE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Austin, James A.....	Worthington	1374
Austin, Chas. K.....	Worthington	5395
Bond, James T.....	Jasonville	1259
Boner, Emory	Marco	1042
Brown, James F.....	Owensburg	411
Brown, Sylvester L., Jr.....	Owensburg	410
Bruner, Mason	Linton	1262
Burke, William H.....	Scotland	2759
Burke, Franklin Lewis	Bloomfield	92
Cooper, Isaac F.....	Worthington	1079
Cooper, Joseph M.....	Worthington	1080
Cravens, Geo. E.....	Bloomfield	2021
Duncan, Frank G.....	Linton	2204
Earle, Lennie N.....	Linton	3079
English, James D.....	Worthington	3788
Hamilton, W. J.....	Linton	2057
Hancock, Ogle B.....	Worthington	5386
Hannan, Junius H.....	Scotland	5459
Hollis, Thomas H.....	Worthington	3883
Ikerd, John W.....	Switz City	2611
Lacy, J. J.....	Jasonville	3621
Leavitt, H. B.....	Worthington	3257
McIntosh, N. G.....	Midland	3755
Pickel, J. M.....	Midland	3756
Rush, Doctor B.....	Owensburg	2845
Scott, Lafe	Newberry	3518
Shertzer, Walter W.....	Bloomfield	5244
Simons, James S.....	Lyons	1439
Stalcup, Harry R.....	Jasonville	5434
Steelman, Henry	Linton	1574
Williams, Harry	Bloomfield	3496
Williams, Charles C.....	Jasonville	2561

HAMILTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Aldred, John A.....	Hortonville	3730
Austin, Isaac B.....	Noblesville	1957
Axline, Will E.....	Noblesville	1958
Baldum, Arry G.....	Noblesville	2172
Barker, Henry A.....	Westfield	3633
Barnett, George T.....	Cicero	2545
Barnett, Roscoe	Cicero	2546
Collins, William Z.....	Cicero	1083
Conklin, W. H.....	Westfield	214
Elliott, C. E.....	Sheridan	3038
Clifford, John	Sheridan	1369
Glenn, A. A.....	Noblesville	222
Gordon, B. S.....	Eagletown	2572

HAMILTON COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Gregory, Charles E.....	Sheridan	3913
Haines, Frank A.....	Noblesville	3795
Harrison, Allen C.....	Fishers Switch	3145
Hobbs, David C.....	Atlanta	2824
Mendenhall, William W.....	Westfield	2686
Mendenhall, Olin H.....	Cicero	2429
Mendenhall, Noah M.....	Brazil	3401
Menough, James Howard.....	Brazil	2120
Mitchell, Charles L.....	Noblesville	554
Morris, Thomas Earl	Atlanta	2825
Murray, George W.....	Dublin	2159
Orr, Charles Wildey	Arcadia	688
Rayl, Alfred V.....	Carmel	3268
Rodenbeck, Charles A.....	Arcadia	5469
Ross, Frank E.....	Noblesville	1956
Schultz, Fred W.....	Brazil	1844
Schultz, Lewis O.....	Brazil	1840
Scott, John E.....	Atlanta	2986
Small, L. J.....	Carmel	3269
Small, H. M.....	Carmel	3270
Smith, Ray	Brazil	3098
Sourwine, J. N.....	Brazil	2246
Truitt, Roland S.....	Noblesville	1735
Truitt, A. W.....	Noblesville	1686
Ward, Charles B.....	Noblesville	2609
Warford, Franklin M.....	Cicero	1972
Winders, Oliver P.....	Arcadia	3640

HANCOCK COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Alford, Chas. H.....	Fortville	2536
Blackburn, David F.....	Fortville	2698
Blakely, G. H.....	Warrington	3327
Brewster, Frank W.....	Fortville	539
Button, C.....	Fortville	5027
Early, Vincent L.....	Greenfield	450
Fitz, William Newton	Greenfield	5349
Frazier, Randsane	Maxwell	1810
Frazier, David P.....	Maxwell	1809
Henricks, Thomas M.....	Greenfield	2468
Houck, Abraham S.....	Shirley	2523
Johnson, John F.....	Fortville	2699
Johnson, William P.....	Greenfield	5263
Julian, Geo. W.....	Wilkinson	3491
Lane, John H.....	Charlotttsville	273
Miller, Nathan G.....	Shirley	3684

HANCOCK COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Parish, William L.....	New Palestine	2082
Pennington, James H.....	Greenfield	2243
Pilkenton, Wm. A.....	McCordsville	2413
Pilkenton, A. C.....	Greenfield	314
Pugh, Willard S.....	Greenfield	3539
Quigley, Michael C.....	Greenfield	496
Quigley, Edward F.....	Greenfield	772
Rucker, Jesse S.....	Greenfield	5410
Rupp, William H.....	Shirley	2029
Selman, Thomas H.....	Greenfield	2051
Thomas, Arden H.....	Fortville	540
Whetzel, Paul D.....	Greenfield	5427

HARRISON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bottorff, John C.....	Corydon	1325
Brewster, James B.....	Corydon	144
Byrum, Geo. B.....	Laconia	3404
Davis, W. H.....	Corydon	3455
Fleshman, Lyman S.....	Mauckport	1762
Flynn, D. W.....	Mauckport	3192
Funk, William E.....	New Amsterdam	3744
Isterling, John P.....	Corydon Junction	1793
Kessinger, W. Scott.....	Elizabeth	2560
Lawson, John E.....	Corydon	1324
McDermott, J. P.....	Corydon	3407
Meyer, Christian	Lanesville	15
Ruby, Louis O.....	Corydon	1414
Thompson, Inez	Elizabethtown	3887
Wolfe, L. O. P.....	Mauckport	824
Wolpert, William I.....	Elizabeth	1666

HENDRICKS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Baughman, Lemuel B.....	Danville	2219
Clawson, E. F.....	Clayton	1867
Dungan, James A.....	Danville	2646
Franklin, Fred	Belleville	1519
Green, Hiram A. L.....	Plainfield	693
Green, Morton D.....	Brownsburg	1252
Hadley, Ozro E.....	Amo	2416
Haines, Calvin O.....	Danville	2218
Hall, Ernest Renan	Stilesville	1109
Haynes, E. M.....	Pittsboro	3648
Hallett, Claude B.....	Brownsburg	5481

HENDRICKS COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Jones, Leonard S.....	Clayton	1839
Keating, James W.....	North Salem	395
Knight, Roscoe C.....	Coatesville	447
Leachman, William E.....	Lizton	2520
Marsh, Julius C.....	Danville	2551
Miller, George W.....	Belleville	1158
Neaville, John F.....	Pittsboro	2705
Nichols, Roy H.....	Danville	1654
Nichols, Oliver E.....	Danville	1653
Nichols, E. D.....	Danville	1655
Osborn, Verhn K.....	Plainfield	3374
Salmon, Walter Leslie	Brownsburg	5280
Sharp, Joseph G.....	Coatesville	1077
Thompson, Cyrus L.....	Danville	2645
Trotter, Lee B.....	Lizton	2700
Van Zandt, Carl	Brownsburg	5324

HENRY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Addison, Iverson R.....	Cadiz	441
Beam, William H.....	New Castle	2213
Becker, Walter F.....	Middletown	501
Benedict, Hanford	Springport	113
Brown, Paul D.....	Knightstown	2058
Brown, Aaron D.....	Mooreland	2833
Butler, J. T.....	Knightstown	1682
Carithers, O. L.....	New Castle	3799
Conner, Willis B.....	New Castle	2460
Copper, Dallas E.....	Knightstown	5394
Eskew, John A.....	New Castle	3285
Fackler, V. Nevin	Lewisville	5181
Folkner, Isaac T.....	Kennard	3609
Fouche, Alonzo C.....	Knightstown	3138
Hamilton, Earl	Mt. Summit	2827
Keller, John C.....	Lewisville	82
Kinsey, Lewis E.....	New Castle	2054
Kirk, Philander M.....	New Castle	2055
Lynn, Charles E.....	New Castle	2212
Macy, Lambert	Greensboro	2640
Miller, Andrew S.....	Middletown	977
Miller, Frank P.....	Middletown	976
Mowrer, George F.....	New Castle	2490
Pence, W. M.....	New Castle	2554
Province, A. J.....	Mt. Summit	3453
Reeves, N. W.....	Knightstown	2242
Smith, Clyde N.....	Spiceland	5038

HENRY COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Smith, Ed.....	New Castle	2491
Templin, James L.....	Blountsville	3259
Wayman, J. C.....	New Castle	207
Wills, Leslie A.....	Lewisville	3347
Wink, Henry Vern	Knightstown	5352

HOWARD*COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bates, H. E.....	Kokomo	2970
Bottorff, Charles M.....	Kokomo	3356
Doty, John W.....	Kokomo	2452
Fell, Elizabeth	Greentown	625
Fell, John	Greentown	624
Gerhart, Frank H.....	Kokomo	5447
Hollowell, Orris J.....	Kokomo	2453
Hubbard, Frank H.....	Kokomo	909
Iles, Jeannot	Russiaville	3711
Iles, Wm. E.....	Russiaville	1289
Jay, Joe P.....	Kokomo	5404
Kemp, G. W.....	Russiaville	3156
Leach, Percy	Kokomo	1872
McInturf, James Franklin.....	Hemlock	3879
Mahin, Chas. F.....	Kokomo	3203
Manring, Wm.....	Greentown	1999
Meck, Henry J.....	Kokomo	1874
Meck, G. E.....	Kokomo	1877
Meck, Wm. T.....	Kokomo	1876
Mehlig, Louis	Kokomo	2601
Miller, Elmer L.....	Kokomo	2292
Morgan, John A.....	Kokomo	3161
Mote, George R.....	Kokomo	5398
Pence, Frank S.....	Kokomo	5228
Ralston, George W.....	Kewanna	674
Ryan, Larry C.....	Kokomo	1873
Scott, Charles A.....	Kokomo	171
Scott, James W.....	Kokomo	68
Shull, Lonzo L.....	Kokomo	5473
Smith, Jacob E.....	Greentown	5298
Smith, Oscar C.....	Kokomo	2600
Stansbury, William E.....	Kokomo	804
Stiver, Noble C.....	Kokomo	5145
Thomas, Daniel E.....	Center	1892
Todhunter, James M.....	Kokomo	2828
Tompkins, John W.....	Kokomo	1878

HUNTINGTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Anderson, Charlie M.....	Mt. Etna	363
Anderson, Geo. F.....	Mt. Etna	2664
Baker, Jerome C.....	Huntington	2284
Beckstem, Adolph C.....	Huntington	665
Bonifield, T. U.....	Warren	1338
Boulin, Ernest A.....	Huntington	3004
Bradley, Oscar E.....	Huntington	2170
Carter, James E.....	* Huntington	607
Chenneour, H. C.....	Roanoke	2141
Chenneour, F. G.....	Roanoke	2142
Coles, Albert	Warren	1423
Dumbauld, John H.....	Huntington	294
Flora, Frank F.....	Huntington	2723
Frech, Albert	Huntington	3408
Goss, Orle M.....	Warren	157
Hackett, Charles L.....	Roanoke	342
Hackett, John	Roanoke	341
Hardman, Jesse Monroe.....	Huntington	5068
Harvey, Frank J.....	Markle	2282
Heaston, Jacob H.....	Huntington	534
Hickerson, W. H.....	Warren	158
Kaylor, Milo	Huntington	911
Kerlin, Leroy B.....	Huntington	5128
Lovett, Justin	Huntington	912
McCollum, John W.....	Bippus	1013
Perry, Ira E.....	Bippus	2031
Plaster, Conrad S.....	Banquo	3882
Raus, H. L.....	Huntington	3465
Roe, Hallie J.....	Markle	5483
Russell, Oscar E.....	Huntington	2169
Schaefer, M. B.....	Huntington	2859
Smethurst, Frank M.....	Warren	1110
Sprowl, Joseph G.....	Warren	2999
Sprowl, John S.....	Warren	592
Stevens, Albert J.....	Huntington	571
Wall, Francis M.....	Warren	591
Walter, Chas. A.....	Huntington	2463
Youse, Edward E.....	Markle	2802

JACKSON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Andrews, Josiah H.....	Seymour	5056
Brock, Chas.	Ewing	666
Burrell, John B.....	Brownstown	2038
Cox, Richard A.....	Seymour	28
Emerson, Orlean R.....	Brownstown	1323

JACKSON COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Fultz, William	Crothersville	3450
Gibson, George W.	Houston	714
Gregor, Charles E.	Tampico	5419
McMillan, James P.	Medora	1041
Meyer, George F.	Seymour	2537
Milhous, C. W.	Seymour	1574
Nowlin, Clyde H.	Crothersville	2929
Pellens, A. J.	Seymour	240
Peter, W. F.	Seymour	1663
Pitcher, Peter M.	Trafalgar	3530
Schwenk, George J.	Seymour	29
Scott, Wm. E.	Mooney	2547
Settle, Charles E.	Freetown	1626
Smith, Tilden	Vallonia	1797
Stilwell, R. J.	Ewing	617
Sumner, Walter C.	Seymour	2786
Veazey, Ida B.	Medora	2120
Warner, J. A.	Crothersville	3619
Warner, William H.	Crothersville	3524

JASPER COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brenner, Bert L.	Rensselaer	1050
Fendig, Simon	Wheatfield	201
Fendig, Louis	Rensselaer	2315
Fendig, B. F.	Rensselaer	2314
Hopkins, Geo. W.	Rensselaer	3324
Hunt, Judson J.	Rensselaer	3209
Kirk, A. L.	Rensselaer	3594
Kirk, A. E.	Rensselaer	3593
Larsh, Joseph A.	Rensselaer	3322
Lockwood, Jasper	Laurel	3678
Long, Abram F.	Rensselaer	1051
Meyer, Frank B.	Rensselaer	3236
Peck, Frank L.	Remington	468
Smith, Wm. R.	Laurel	1668
Townsend, William	Remington	205
Townsend, Claude	Remington	204

JAY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adair, Alpheus A.	Portland	1298
Adair, Charles P.	Portland	1299
Adair, John A. M.	Portland	1300
Black, William R.	Blaine	3147
Cunningham, Walker M.	Portland	1488

JAY COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Cunningham, David F.....	Portland	1489
Eden, James E. L.....	Powers	1922
Fennig, Lewis P.....	New Corydon	575
Garber, J. B.....	Dunkirk	2420
Gordon, Charles Francis	Pennville	5140
Gray, Jos. H.....	Dunkirk	2875
Hoppes, William Oscar	Red Key	5192
Houser, Leon B.....	New Corydon	1122
Houser, Amos	New Corydon	1121
James, Elmer E.....	Portland	819
Keasbey, Thomas W.....	Dunkirk	2298
Kennedy, Adam W.....	Dunkirk	1022
King, D. S.....	Red Key	1828
Long, Noah W.....	Portland	5230
Orr, S. W.....	Red Key	1890
Pierce, John S.....	Red Key	1811
Rarick, Dr. I. N.....	Powers	3854
Shepherd, George W.....	Red Key	2312
Shull, Edward L.....	Bryant	2148
Skinner, Chas. V.....	Salamonie	178
Stevens, George L.....	Portland	615
Teeter, Geo. M.....	Pennville	874
Teeter, Albert T.....	Pennville	875
Walker, Isaac James	Pennville	3033
Walling, Lewis G.....	Pennville	560
Whipple, Olney	Portland	2320

JEFFERSON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
De Loste, Joseph S.....	Madison	2000
Gibson, John J.....	Madison	1915
Hargan, James, Jr.....	Madison	3062
Harper, Frank M.....	Madison	1917
Heberhart, Hubert E.....	North Madison	1542
Heberhart, William G.....	Madison	2124
Hord, William A.....	Deputy	2571
Lewis, George B.....	Dupont	3912
Peters, William H.....	Madison	2940
Rice, Dr. L.....	Madison	272
Roch, Oscar Edward	Madison	3689
Smith, Marshal C.....	Madison	3060

JENNINGS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bantz, G. W.....	North Vernon	2548
Bortsfield, W. Grant.....	North Vernon	2817
Butler, Chas. D.....	Scipio	2033

JENNINGS COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Davis, Ellsworth D.....	North Vernon	1326
Dils, John M.....	North Vernon	5433
Doggett, J. L.....	North Vernon	629
Firsich, Balthasar	North Vernon	1690
Fish, Sylvanus M.....	Paris Crossing	1704
Naher, W. M.....	Vernon	3436
Rockafeller, Hester	Butlerville	2722

JOHNSON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brewer, William E.....	Greenwood	2688
Brewer, Harvey	Greenwood	2687
Chandler, Harry R.....	Edinburg	3179
Deupree, Avery E.....	Edinburg	5179
Eccles, Samuel B.....	Franklin	3732
Howe, Lawrence E.....	Bargersville	3666
List, Samuel W.....	Franklin	2544
Lynch, Martin	Edinburg	2897
McCollough, Wm. B.....	Franklin	2444
Means, Ora W.....	Franklin	2134
Miller, Dr. D. H.....	Franklin	2135
Mutz, John Roscoe	Edinburg	2895
Owen, Alfred W.....	Greenwood	397
Taylor, Otto A.....	Edinburg	3230
Throckmorton, Edward	Franklin	2838
Wilkes, Robert A.....	Edinburg	2849
Wood, Robert C.....	Franklin	2839
Wright, A. F.....	Nineveh	3510

KNOX COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Albert, H. F.....	Freelandville	921
Barr, Robert D.....	Bruceville	743
Baugh, John A.....	Vincennes	371
Berry, Alex M.....	Freelandville	3049
Bochner, Wm.....	Vincennes	2022
Bochner, Albert M.....	Vincennes	2504
Brocksmith, Wm. H.....	Vincennes	1442
Byers, B. F.....	Bicknell	2373
De Lay, William M.....	Bicknell	2165
De Priest, Homer C.....	Vincennes	5467
Denison, R. C.....	Vincennes	3168
Duesterberg, Mary	Vincennes	2867
Forgy, H. E.....	Decker	697
Hart, John G.....	Bicknell	2408
Hitch, William E.....	Wheatland	2107

KNOX COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
McClary, James D.....	Sandborn	2641
Mayberry, Guy W.....	Bicknell	3522
Miller, Charles S.....	Vincennes	2296
Miller, Albert F.....	Vincennes	5334
Miller, John Henry	Vincennes	1390
Moore, Reuben G.....	Vincennes	1391
Nicholson, A. C.....	Wheatland	2563
Nierste, R. C.....	Westphalia	2028
Paul, Jno. R.....	Vincennes	3216
Paul, Charlie A.....	Vincennes	3217
Purcell, A. J.....	Freelandville	2399
Ray, J. W.....	Emison	3838
Reed, James E.....	Vincennes	895
Reeve, Robert R.....	Edwardsport	523
Roeder, Lawrence	Sandborn	1189
Sacray, I. D.....	Monroe City	3793
Scudder, Jacob F.....	Edwardsport	522
Townsend, L. E.....	Vincennes	1207
Watjin, Herman Otto	Vincennes	1669
Watjin, Herman J.....	Vincennes	162
Watjin, Woodville C.....	Vincennes	161
Wells, John S.....	Bicknell	2374
Winegar, Logan J.....	Vincennes	108
Werker, Herman J.....	Vincennes	2903

KOSCIUSKO COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Arvine, James D.....	Etna Green	787
Cammack, Edmond	Milford	779
Cline, Joseph E.....	Silver Lake	1280
Deboer, William H.....	Piercetown	3242
Doddridge, William B.....	Mentone	1845
Ervin, Arthur B.....	North Webster	3680
Estlick, Thomas I.....	Syracuse	2350
Greene, Lelia D.....	Syracuse	1151
Greene, Frank W.....	Syracuse	1150
Groves, Frank P.....	Milford	2668
Hall, Alva Curtis	Sidney	1847
Hastings, Delbert W.....	Milford	832
Hoch, F. L.....	Syracuse	3155
Irvine, Joseph A.....	Leesburg	3105
Irvine, Garrett W.....	Leesburg	2146
Irvine, Fred D.....	Leesburg	2145
Jordan, Orion B.....	Etna Green	1093
Lantz, J. J.....	Warsaw	3781
Longstreet, E. H.....	Warsaw	1881

KOSCIUSKO COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Miller, Joseph H.....	Syracuse	2349
Rager, Harley P.....	Silver Lake	5242
Rovenstine, Cassius A.....	Atwood	2250
Ruggles, Frederic G.....	Warsaw	5301
Scoles, E. Allen	Claypool	1764
Shafer, Charles W.....	Mentone	2321
Shroyer, Charles	Warsaw	5036
Stevenson, Chauncey C.....	Mentone	1846
Thomas, George M.....	Warsaw	3252
Tucker, Fred W.....	Warsaw	1302
Vaughn, William H.....	Atwood	974
Vaughn, Lynn D.....	Atwood	975
Watson, John B.....	Warsaw	389
Wirick, William F.....	Warsaw	2725

LAGRANGE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Allen, John C.....	South Milford	1888
Antonides, John E.....	Lagrange	1752
Ballou, Emoe S.....	Lagrange	1753
Brant, C. E.....	Lagrange	2068
Brown, Fred J.....	Lagrange	2163
Cooper, Stephen T.....	Lima	526
Cutler, Ernest L.....	Wolcottville	873
Dryer, Romie P.....	Lagrange	2295
Durand, James A.....	Lima	768
Ford, R. B.....	Stroh	1951
Garlets, Aden	Mongo	1112
Gay, James	Topeka	600
Gerber, Alonzo L.....	Topeka	2386
Hagerty, Emmett B.....	Scott	1379
Hagerty, Charles B.....	Scott	1380
Keefer, Elisha	Mongo	2949
Mast, Uriah E.....	Shipshewana	1195
Miller, Corwin F.....	Wolcottville	2557
Miller, Ida Belle	Wolcottville	2556
Ritter, A. W.....	Topeka	1232
Rowe, Laora M.....	Lagrange	2157
Stage, James B.....	Lima	420
Sunthimer, J. E.....	Shipshewana	1194
Thomas, J. F.....	Lagrange	2421
Weaver, John B.....	Shipshewana	159
Wert, Dallas	Stroh	3250
Zook, James E.....	Lima	769

LAKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Armstrong, James T.....	Hammond	1798
Aubry, Joseph A.....	Hammond	2434
Aubry, Edward A.....	Hammond	2568
Becknell, Henry M.....	Hammond	1381
Bell, A. Howard.....	Gary	5415
Boyer, B. N.....	Whiting	1328
Boyer, Ella M.....	Whiting	1329
Buchanan, Albert D.....	Whiting	1719
Bunnell, K. C.....	Hammond	3103
Cooper, P. A.....	Hammond	2385
Chrzanowski, B. J.....	Whiting	5479
Cwiklinski, Vincent	Hammond	2778
Driscoll, Davis Christopher.....	Lowell	2962
Dunham, Nellie B.....	Hammond	1382
Handley, Kate	Lowell	2195
Handley, William L.....	Lowell	2196
Henthorne, George F.....	Whiting	3725
Hiatt, Thomas W.....	Indiana Harbor	3488
Hunt, Frank L.....	Lowell	1163
Hunt, Ida T.....	Lowell	2974
Johnson, Matthew A.....	East Chicago	5015
Judy, Chas. B.....	Hammond	635
Kepert, Andrew Edmond.....	Hammond	5327
Krinbill, Oscar A.....	Hammond	2357
Kohr, Thomas William.....	Hammond	3623
Kohr, Rebecca	Hammond	3624
Kolb, Michael	Hammond	1087
Lender, Gustav	Whiting	274
Lender, Janet	Whiting	275
Lenney, Julie R. S.....	Crown Point	3131
Mattern, Lemuel H.....	Whiting	932
Matotte, James C.....	Westville	926
Meissner, Edward L.....	Whiting	3187
Miller, Philip	Hammond	2469
Negele, Otto	Hammond	1526
Nelson, Carl E.....	Hammond	5282
Orf, George	Indiana Harbor	263
Ostronski, Romnold	Hammond	2375
Ostronski, Leonard J.....	Hammond	5253
Pannenberg, John C.....	Hammond	3789
Peterson, Milton W.....	Hobart	1052
Scheddell, William Allen	Crown Point	2164
Scheddell, E. F.....	Hobart	2042
Schlicker, Alex. G.....	East Chicago	1983
Spear, Robert	East Chicago	2791
Stauffer, Edwin R.....	Hammond	2881
Swartz, Harry D.....	Crown Point	339

LAKE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Swartz, Henry P.....	Crown Point	340
Townsley, Frank L.....	East Chicago	2198
Veaco, Sidney H.....	East Chicago	5316
Weis, Joseph W.....	Hammond	2358
Weis, L. Harry	Hammond	5241
Wood, Nathan R.....	Hammond	3564

LAPORTE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bowell, De Alton H.....	Rolling Prairie	868
Boyd, Thomas H.....	Laporte	2879
Buechner, Edwin John	Laporte	5357
Callender, Jesse Martin	Laporte	1930
Canfield, Richard W.....	Laporte	5268
Collom, George W.....	Mill Creek	3514
Cameron, J. B.....	Michigan City	794
Conjell, Joseph M.....	Union Mills	618
Cunningham, Mills S.....	Michigan City	2236
Denison, George S.....	Hanna	1345
Ehrlich, Herman K.....	Laporte	1054
Flood, J. O.....	Laporte	1341
Geetenbort, Frederick B.....	Laporte	1378
Henpel, Frank C.....	Laporte	2877
Hornung, Carl G.....	Laporte	5355
Jones, Harry H.....	La Crosse	720
Kloepfer, Otto A.....	Michigan City	1035
Krawer, Leonard G.....	Michigan City	2090
Lindemann, Emil W.....	Michigan City	358
Meissner, Frederick W.....	Laporte	621
Moran, Edward M.....	Michigan City	297
Peters, David C.....	Laporte	985
Savage, Louis P.....	Laporte	5270
Scott, Ezra T.....	Westville	925
Selby, Fred S.....	Laporte	1725
Sharples, Philip D.....	Laporte	3486
Spaeth, Eugene	Michigan City	359
Wade, Frank J.....	Laporte	2060
Wiesjohn, John G.....	Wanatah	777
Wiesjohn, Willie H.....	Wanatah	5406
Willitts, Charles C.....	Michigan City	403
Wojahn, Herman G.....	Wanatah	778
Woodson, William F.....	Michigan City.....	296
Zahnt, Ed C.....	Laporte	1342

LAWRENCE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bailey, Robert M.....	Bedford	5405
Beddoe, Robert I.....	Bedford	969
Braman, Frank R.....	Mitchell	3296
Branaman, C. A.....	Bedford	475
Burton, Walter W.....	Mitchell	821
Campbell, H. F.....	Bedford	1943
Chartain, Frank	Mitchell	3676
Chrisler, Stanley T.....	Bedford	3075
Dodd, George M.....	Bedford	774
Douthitt, Jas. W.....	Bedford	1945
Franklin, Coral E.....	Bedford	515
George, Harvey Monroe	Oolitic	5290
George, Jasper N.....	Oolitic	2637
George, Chas. B.....	Oolitic	3368
Ireland, Emmet L.....	Mitchell	500
Jolly, Walter E.....	Bedford	5210
Martin, R. E.....	Heltonville	382
Matthew, O. R.....	Mitchell	5448
Mitchell, Edgar D.....	Bedford	1596
Munger, Joseph Arthur	Mitchell	51
Snapp, James M.....	Bedford	3152

MADISON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Applegate, Jas. B.....	Perkinsville	2772
Baker, Ernest L.....	Anderson	1350
Bragdon, Robert E.....	Anderson	917
Bireley, William H.....	Alexandria	1094
Brickley, Eugene T.....	Anderson	2741
Brobst, A. H.....	Elwood	5393
Bowlin, Charles L.....	Elwood	3921
Busby, Thomas M.....	Lapel	682
Carver, Roscoe Athen	Lapel	5190
Cassell, Ed S.....	Anderson	3256
Cassell, J. M.....	Anderson	3255
Cogswell, Walter	Elwood	233
Cole, W. D.....	Anderson	2168
Cook, George E.....	Anderson	791
Crouse, Justus H.....	Anderson	595
Daugherty, Chas. H.....	Anderson	559
Dehority, Thomas L.....	Anderson	1569
Dickey, Edgar L.....	Lapel	3041
Diven, James R.....	North Anderson	1046
Dugan, John W.....	Elwood	5462
Elliott, J. R.....	Elwood	234
Faucett, Richard D.....	Summitville	1970

MADISON COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Gante, Henry	Anderson	541
Green, Fred W.....	Elwood	232
Green, E. E.....	Elwood	231
Guard, Charles E.....	Alexandria	1443
Hadley, Clinton C.....	Anderson	2500
Hawkins, D. L.....	Anderson	103
Henderson, Chas. A.....	Anderson	971
Henderson, Charles Edgar	Anderson	972
Hinshaw, Orlando D.....	Elwood	1706
Holtzman, Henry	Elwood	704
Howard, Homer E.....	Summitville	169
Howard, Edward R.....	Summitville	170
Hubbard, William	Anderson	3433
Jones, Fernando C.....	Alexandria	750
Kelly, Scott	Alexandria	5343
King, Daniel B.....	Elwood	1184
Kissling, Frederick H.....	Elwood	1365
Kute, James H.....	Elwood	1647
Lee, James C.....	Anderson	2013
Leeson, Howard E.....	Elwood	5361
Lemasters, Chester H.....	Anderson	2495
Lewis, Walter H.....	Pendleton	1065
Lewis, Horace F.....	Pendleton	1066
McGhee, Wm.....	Anderson	3870
Marsh, Orlando Shirley	Anderson	839
Menefee, Renkin Ashford	Summitville	3233
Moore, Francis Otis	Alexandria	235
Morgan, Earl R.....	Anderson	5465
Moser, Frank C.....	Anderson	1578
Norman, J. R.....	Markleville	3805
Parchu, Jessie	Anderson	5288
Phillips, W. G.....	Frankton	3591
Phillips, Ernest H.....	Frankton	2069
Rector, N. W.....	Ingalls	1521
Reese, Geo. B. M.....	Orestes	5385
Robinson, Erastus C.....	Alexandria	1444
Rosswurm, Fred	Summitville	3409
Roush, Wilber Clark	Anderson	596
Rust, Thomas M.....	Anderson	3330
Rust, John A.....	Anderson	3329
Saylor, Dr. F. L.....	Elwood	131
Searle, Ernestus P.....	Anderson	2216
Seward, Robert A.....	Alexandria	2346
Shepard, Earl R.....	Anderson	3010
Shepard, Solomon D.....	Anderson	3011
Sneed, Bert E.....	Elwood	2657
Sparks, Walter F.....	Anderson	2026

MADISON COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Starrett, William L.....	Anderson	2459
Stringfellow, Harry	Elwood	908
Tanke, E.....	Pendleton	1434
Tanke, Mrs. E.....	Pendleton	1681
Temple, Burton	Anderson	2125
Thompson, Earl H.....	Elwood	3039
Walser, John A.....	Anderson	1923
Youmans, Samuel F.....	Anderson	628
Youmans, Ida J.....	Anderson	3360

MARION COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Abbott, Howe	Indianapolis	5249
Adams, James Bennett	Indianapolis	2826
Adair, Albert E.....	Indianapolis	2738
Adams, Joseph H. B.....	Indianapolis	2826
Adams, Claude Veiley	Indianapolis	2417
Albert, Martin J.....	Indianapolis	922
Alexander, Joe H.....	Indianapolis	3017
Alford, Thomas A.....	Indianapolis	3817
Allemong, Harry M.....	Indianapolis	5011
Allen, Le Roy	Indianapolis	486
Allen, Granville G.....	Indianapolis	
Allison, Edward H.....	Indianapolis	3659
Anderson, James L.....	Indianapolis	1331
Arnett, Will N.....	Indianapolis	17
Arold, Edward J.....	Indianapolis	5413
Atchison, Harry O.....	Indianapolis	2154
Aughinbaugh, Edward L.....	Indianapolis	5113
Avery, George T.....	New Augusta	3169
Bailey, Preston B.....	Southport	3525
Baird, Wm. H.....	Indianapolis	1435
Baker, William Lemon.....	Indianapolis	502
Bakhaus, D. M.....	Indianapolis	1820
Bakhaus, George W.....	Indianapolis	748
Banta, Horton	Indianapolis	1335
Barnhart, Bert	Indianapolis	5240
Barmm, Chas. F.....	Indianapolis	3118
Baron, Chas. F.....	Indianapolis	62
Bassett, Homer D.....	Indianapolis	1859
Batchelor, Frank E.....	Indianapolis	2443
Bean, Leonard B.....	Indianapolis	1611
Bean, Carleton W.....	Indianapolis	491
Beckman, Frederick G.....	Indianapolis	3867
Bedford, George T.....	Indianapolis	2731
Bedford, Dr. C. T.....	Indianapolis	2732

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bell, Foster Merton	Indianapolis	5321
Benson, Warner N.....	Indianapolis	5017
Berner, Louis E.....	Indianapolis	1539
Bersell, F. G.....	Indianapolis	998
Bibbins, Thomas E.....	Indianapolis	5189
Birk, Harry Albert	Indianapolis	1497
Birk, William M.....	Indianapolis	20
Blackketter, Geo. S.....	Indianapolis	2812
Blodau, Robert P.....	Indianapolis	3602
Boatman, Frank J.....	Lawrence	2529
Boggs, Moses Taylor	Indianapolis	1721
Bolin, R. M.....	Indianapolis	375
Borst, George F.....	Indianapolis	2469
Borst, Harry J.....	Indianapolis	3028
Boswell, David A.....	Indianapolis	3177
Bourgoame, Charles Louis	Indianapolis	1317
Bowens, Adrian	Indianapolis	2186
Brandan, Harvey L.....	Indianapolis	5492
Brehm, Bernhard	Indianapolis	260
Brenner, Clarmont	Indianapolis	645
Brock, Keller T.....	Indianapolis	5246
Broich, Charles H.....	Indianapolis	1364
Brooks, Onas W.....	Indianapolis	656
Brookshire, Swan	Indianapolis	1245
Brown, Guy C.....	Indianapolis	3193
Browning, Robert C.....	Indianapolis	3625
Bullington, Frank L.....	Indianapolis	888
Burget, W. H.....	Indianapolis	3391
Buron, Jacob J.....	Indianapolis	63
Cade, John W.....	Indianapolis	5400
Cain, Taylor R.....	Indianapolis	1630
Campbell, Harry G.....	Indianapolis	1976
Carnefix, Louis W.....	Indianapolis	5310
Carr, Arthur B.....	Indianapolis	2967
Carter, Frank Henry	Indianapolis	2916
Carter, Albert H.....	Indianapolis	2913
Carter, Charles A.....	Indianapolis	1699
Carter, Horlen Wilson	Indianapolis	1857
Carter, Harlen Wilson Seawright.....	Indianapolis	5267
Carter, Emma	Indianapolis	1683
Case, George William	Indianapolis	5281
Caskey, Walter L.....	Indianapolis	3246
Chambers, Avery St. C.....	Indianapolis	54
Chambers, Oscar C.....	Indianapolis	55
Chavis, Charles	Indianapolis	3769
Chinn, Thomas J.....	Indianapolis	2569
Clark, John C.....	Indianapolis	3229

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Clary, Ara G.....	Indianapolis	2785
Cochran, Alexander W.....	Indianapolis	1815
Cole, James R.....	Indianapolis	2485
Coney, Edward T.....	Indianapolis	2002
Confer, L. L.....	Indianapolis	453
Converse, R. V.....	Indianapolis	1312
Coons, William I.....	Indianapolis	3163
Cottrell, John W.....	Indianapolis	3344
Coukey, John A.....	Indianapolis	2087
Courtney, Anthony	Indianapolis	5396
Cowon, Harry Arthur	Indianapolis	2914
Crawford, Orin D.....	Indianapolis	1265
Crawford, Edward M.....	Indianapolis	1264
Creagh, William F.....	Indianapolis	5330
Critz, Bert	Indianapolis	2997
Crooks, J. W.....	Indianapolis	3715
Darnell, C. A.....	Indianapolis	5083
Darrah, Walter H.....	Indianapolis	422
Darrah, Mattie L.....	Indianapolis	57
Dearmin, E. F.....	Indianapolis	1887
Deitch, Otto A.....	Indianapolis	959
Deitch, Oscar S.....	Indianapolis	3668
Deming, Adrian F.....	Indianapolis	1610
De Vore, Wilmot E.....	Indianapolis	1101
Dietz, Fred T.....	Indianapolis	2488
Dodge, William A.....	Indianapolis	2706
Doerr, John N.....	Indianapolis	2398
Donaldson, John A.....	Indianapolis	3303
Doonell, E. R.....	Indianapolis	877
Dorner, Charles Theodore	Indianapolis	723
Douglass, William E.....	Indianapolis	2538
Downs, Ferris C.....	Indianapolis	5416
Drew, Harry	Indianapolis	5142
Duesterberg, Wm. G.....	Indianapolis	5315
Dugan, Thomas J.....	Indianapolis	2844
Dunham, Daniel B.....	Indianapolis	2086
Dunnington, Carl C.....	Indianapolis	1689
Durbin, Lloyd W.....	Indianapolis	218
Eastburn, David J.....	Indianapolis	2061
Ebert, George W.....	Indianapolis	5010
Egbert, Dr. James	Indianapolis	1203
Egbert, Tillie	Indianapolis	1202
Eitel, Charles A.....	Indianapolis	3278
Elbrecht, Wm. A.....	Indianapolis	5069
Eldred, Frank R.....	Indianapolis	138
Engelking, Frank A.....	Indianapolis	3552
Enners, Edward H.....	Indianapolis	1598

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Erdelmeyer, Frank W.....	Indianapolis	936
Erdelmeyer, Frank	Indianapolis	937
Erganbright, J. R.....	Indianapolis	5271
Ethell, Edward Fuller	Indianapolis	2739
Etter, Karl D.....	Indianapolis	5455
Evans, Mary C.....	Indianapolis	2953
Evans, Maroe	Indianapolis	3166
Eyster, Anna M.....	Indianapolis	1813
Farrar, L. B.....	Indianapolis	1154
Fatout, Arthur	Indianapolis	933
Ferger, Otto	Indianapolis	5103
Ferger, Edward	Indianapolis	3201
Ferger, Gus.....	Indianapolis	5033
Fisher, Samuel A.....	Indianapolis	2175
Fisher, Geo.....	Indianapolis	1658
Fleming, Harry G.....	Indianapolis	1183
Fogas, John T.....	Indianapolis	1044
Fox, Balser L.....	Indianapolis	3134
Francis, J. R.....	Indianapolis	2481
Franer, Herman E.....	Indianapolis	309
Franz, Chas. H.....	Indianapolis	1814
Freund, Wm. C.....	Indianapolis	5124
Frietzsche, Ernest F.....	Indianapolis	3057
Fritz, John T.....	Indianapolis	1157
Frey, F. J.....	Indianapolis	3143
Fueglister, Gustav L.....	Indianapolis	960
Fullenwider, Oscar L.....	Indianapolis	845
Funk, John A. J.....	Indianapolis	5300
Gable, Lewis A.....	Indianapolis	831
Gantz, Jacob S.....	Indianapolis	3819
Garrettson, J. A.....	Indianapolis	2814
Garrity, John M.....	Indianapolis	883
Garrity, Robert E.....	Indianapolis	878
Gauld, John D.....	Indianapolis	56
Gauld, Alexander B.....	Indianapolis	1606
Gebauer, Emanuel H.....	Indianapolis	3228
Gentle, James M.....	Indianapolis	2626
Giezendanner, Harry F.....	Indianapolis	2288
Goldsmith, Sol	Indianapolis	5108
Graham, William U.....	Indianapolis	981
Grahn, Gustav E.....	Indianapolis	953
Grahn, Edward G.....	Indianapolis	1306
Graves, Mrs. Gilbert H.....	Indianapolis	2252
Graves, Gilbert H.....	Indianapolis	2253
Gray, William	Indianapolis	3176
Green, Hadley E.....	Indianapolis	1251
Green, Otis W.....	Indianapolis	2376

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Grimes, Harvey L.....	Indianapolis	3857
Haag, L. C.....	Indianapolis	2691
Haag, Julius A.....	Indianapolis	2692
Haag, Louis E.....	Indianapolis	2693
Hahn, Charles C.....	Indianapolis	1190
Hall, Minnie P.....	Indianapolis	3398
Hall, Frank A.....	Indianapolis	3397
Hall, Guy C.....	Indianapolis	1637
Halliday, Eustace B.....	Acton	1257
Hammer, N. L.....	Indianapolis	3667
Hammer, Herman H.....	Indianapolis	3052
Hampton, Rufus C.....	Indianapolis	1241
Hanson, Andrew M.....	Indianapolis	3605
Harder, William C.....	Indianapolis	5346
Hargitt, Ernest G.....	Indianapolis	2535
Hawthorne, John W.....	Indianapolis	219
Haydon, David N.....	Indianapolis	3911
Hayes, Gertrude C.....	Indianapolis	349
Hefferman, James	Indianapolis	702
Heider, Joseph L.....	Indianapolis	934
Heims, I. N.....	Indianapolis	3184
Heitkam, Charles O.....	Indianapolis	5134
Hendricks, John E.....	Indianapolis	2963
Hiatt, Walter H.....	Indianapolis	5485
Hidley, John W.....	Indianapolis	662
Hillman, William, Jr.....	Indianapolis	3727
Hinchman, Leonidas Clay.....	Indianapolis	3183
Hoch, Charles F.....	Indianapolis	3154
Hollenbeck, Thomas W.....	Indianapolis	2448
Holmes, Lewis W.....	Indianapolis	2240
Holmes, Wm. F.....	Indianapolis	2239
Hook, John A.....	Indianapolis	5020
Hopkins, Homer D.....	Indianapolis	1336
Hopping, John H.....	Indianapolis	2501
Horner, Otto K.....	Indianapolis	2122
Hoshour, Edward S.....	Indianapolis	452
Hoskins, Charles	Indianapolis	498
Huder, Henry J.....	Indianapolis	1242
Hughel, Clarence	Indianapolis	2854
Hull, W. H.....	Indianapolis	1726
Humphrey, C. A.....	Indianapolis	198
Humston, George G.....	Indianapolis	2603
Hurdy, John N.....	Indianapolis	2482
Izor, Benton H.....	Indianapolis	1399
Izor, Albert	Indianapolis	1400
Jackson, Chas. L.....	Indianapolis	3316
Jamison, James C.....	Indianapolis	2144

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Jeter, Dr. Frank	Indianapolis	3448
Johnson, William H.....	Indianapolis	3065
Johnston, Charles H.....	Cumberland	3739
Johnston, F. F.....	Indianapolis	3794
Jones, Edgar L.....	Indianapolis	5417
Jones, C. A.....	Indianapolis	3910
Jordan, Frances Dudley	Indianapolis	2451
Jordan, William Henry	Indianapolis	2449
Juday, Maurice W.....	Indianapolis	2831
Kardes, Joseph A.....	Indianapolis	5137
Kassulke, August	Indianapolis	5276
Kauzler, John F. W.....	Indianapolis	3859
Keegan, Frank	Indianapolis	3146
Keenan, B. A.....	Indianapolis	1677
Keene, Bernard M.....	Indianapolis	1433
Keene, Jerome J.....	Indianapolis	2911
Keiser, F. R.....	Indianapolis	3493
Keller, Conrad	Indianapolis	948
Kerch, Wm. S.....	Indianapolis	1359
Kern, Walter H.....	Indianapolis	2533
King, Harriet	Indianapolis	2634
King, Henry M.....	Indianapolis	1997
King, L. B.....	Indianapolis	882
King, Abram Hendricks	Indianapolis	2336
Klingensmith, I. L.....	Indianapolis	1523
Kloth, Rudolph D.....	Indianapolis	2635
Kluze, Wm. H.....	Indianapolis	3661
Knamlein, Harry W.....	Indianapolis	5480
Knodel, Ernest F., Jr.....	Indianapolis	3273
Kretsch, Cass	Indianapolis	2074
Krueger, Lewis Edward	Indianapolis	609
Lamberson, Frank O.....	Indianapolis	2592
Lambert, Chas. W.....	Indianapolis	648
Lambert, Charles I.....	Indianapolis	5472
Lambert, James E.....	Indianapolis	3244
Lane, Chas. J. F.....	Indianapolis	1614
Laube, Julius P.....	Indianapolis	1098
Lay, Chas. F.....	Indianapolis	647
Leach, M. V.....	Indianapolis	3502
Lehrritter, Hugo H.....	Indianapolis	425
Lehrritter, Martin J.....	Indianapolis	424
Leist, Jacob L.....	Indianapolis	3034
Le Saulnier, Walter Jean	Indianapolis	5016
Lichtenberger, Frank	Indianapolis	1043
Lindgren, George A.....	Indianapolis	1746
Lindley, Walter C.....	Indianapolis	3526
Loertz, A. F.....	Indianapolis	2755

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Lynch, Michael P.....	Indianapolis	3847
Lynn, Winfield S.....	Indianapolis	1553
Lytle, John H.....	Indianapolis	2712
McAllister, Howard	Indianapolis	5325
McCammon, Bert C.....	Indianapolis	5285
McClain, William H., Jr.....	Indianapolis	43
McDill, Bert L.....	Indianapolis	261
McDonald, John M.....	Indianapolis	590
McDonald, Lemuel A.....	Indianapolis	1456
McKay, John C.....	Indianapolis	2892
McLeay, J. F.....	Indianapolis	3258
McMichael, Robert W.....	Indianapolis	659
McNutt, Wm. Y.....	Indianapolis	2976
McOuat, Burford	Indianapolis	3860
Maas, Albert Garfield	Indianapolis	1599
Malcolm, Jackson D.....	Indianapolis	5255
Manion, John Jas.....	Indianapolis	2890
Marsh, Harry G.....	Indianapolis	1710
Mattill, Louis	Indianapolis	454
Mattill, John	Indianapolis	947
Mauk, John Lewis	Indianapolis	5200
Mead, Jas. C.....	Indianapolis	2081
Means, E. A.....	Indianapolis	5055
Meloin, George M.....	Indianapolis	3084
Mendenhall, W. E.....	Indianapolis	3135
Mendenhall, Lucius L.....	Indianapolis	2177
Mendenhall, Charles W.....	Indianapolis	2674
Merrill, Edward S.....	Indianapolis	879
Merrill, William J.....	Indianapolis	1709
Metzler, S. N.....	Indianapolis	663
Metzler, Arthur C.....	Indianapolis	664
Milford, James Edward	Indianapolis	3157
Millikan, Mont V.....	Indianapolis	2978
Miller, William C.....	Indianapolis	3446
Miller, Albert J.....	Indianapolis	657
Miller, John R.....	Indianapolis	3866
Mills, Garland S.....	Indianapolis	1563
Monninger, Albert D.....	Indianapolis	2846
Mooney, Wm. J.....	Indianapolis	3729
Morchelle, Judson D.....	Indianapolis	2532
Moroney, D. M.....	Indianapolis	1896
Morrison, Geo. C.....	Indianapolis	1816
Montoux, Charles J.....	Indianapolis	1201
Mowrer, James M.....	Indianapolis	3284
Mueller, J. G.....	Indianapolis	1412
Mueller, Chas. G.....	Indianapolis	44
Mueller, Chas. A.....	Indianapolis	1243

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Mueller, Ferdinand A.....	Indianapolis	1486
Muench, Carl P.....	Indianapolis	104
Muhl, Siegmair, Jr.....	Indianapolis	2153
Muhl, Siegmair F.....	Indianapolis	2156
Mullen, Thomas	Indianapolis	1170
Murbarger, Harry E.....	Indianapolis	3660
Myrick, Louis H.....	Indianapolis	749
Nash, L. Tom.....	Indianapolis	3610
Navin, Robert M.....	Indianapolis	2335
Navin, John N.....	Indianapolis	3477
Navin, Arthur J.....	Indianapolis	2736
Niemeyer, Harry F.....	Indianapolis	5344
Nixon, M. D.....	Indianapolis	3687
Norman, George W.....	Indianapolis	1891
Norton, Charles W.....	Indianapolis	3396
O'Brien, Chas. T.....	Indianapolis	1007
Oburn, Samuel J.....	Indianapolis	2982
Olcott, Ellsworth L.....	Indianapolis	1131
Osborne, E. M.....	Indianapolis	1234
Owen, Wm.....	Castleton	3671
Owen, J. B.....	Castleton	3670
Pantzer, John G.....	Indianapolis	2885
Parkhurst, Layton M.....	Indianapolis	2307
Peacock, John C.....	Indianapolis	5319
Pearson, Julius D.....	Indianapolis	842
Pellens, Theo.....	Indianapolis	3013
Pence, David D.....	Indianapolis	5332
Pennington, Logan	Indianapolis	5331
Peters, Edward A.....	Indianapolis	499
Peters, Harry O.....	Indianapolis	2473
Pew, Stanley W.....	Indianapolis	2062
Pfauer, Ernest	Indianapolis	2730
Pickens, Winfield S.....	Indianapolis	2947
Piercy, C. L.....	Indianapolis	3508
Pink, Julius	Indianapolis	1143
Pink, Louis	Indianapolis	1144
Phelan, John	Indianapolis	1103
Phillippe, J. R.....	Indianapolis	5004
Plogsterth, Louis W.....	Indianapolis	2152
Porter, Charles H.....	Indianapolis	1462
Pyke, Frederick P.....	Indianapolis	3599
Raffensperger, Hiram C.....	Indianapolis	2633
Raffensperger, Arthur C.....	Indianapolis	2632
Rathert, William H.....	Indianapolis	1649
Reed, Arthur C.....	Indianapolis	944
Reich, Edw. C.....	Indianapolis	3370
Reisbeck, J. V.....	Indianapolis	5470

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Renkert, Louis H.....	Indianapolis	589
Reno, Chas. F.....	Indianapolis	2093
Reynolds, W. T.....	Indianapolis	1629
Ribble, Amanda E.....	Indianapolis	2950
Ribble, Marquis D.....	Indianapolis	2187
Rice, Harry E.....	Indianapolis	3746
Rich, Albert J.....	Indianapolis	2092
Ridge, Clayton H.....	Indianapolis	109
Ridlen, Charles W.....	Indianapolis	5493
Rife, David L.....	Indianapolis	2056
Rigg, Chas. Franklin	Indianapolis	2773
Roberts, Wm. C.....	Indianapolis	427
Roesch, Edward F.....	Indianapolis	5336
Roesener, Walter Charles H.....	Indianapolis	5197
Roesener, Frank A. H.....	Indianapolis	1777
Rose, Shan S.....	Indianapolis	5329
Rowe, George W.....	Indianapolis	3326
Ruch, Charles E.....	Indianapolis	1102
Rupe, Veazy Price	Indianapolis	1071
Rush, Leroy C.....	Indianapolis	5311
Saladin, Lewis M.....	Indianapolis	5387
Sanders, Reason D.....	Indianapolis	2133
Scanling, Frederick E.....	Indianapolis	5358
Schad, Chas. H.....	Indianapolis	3895
Schaller, Elmer	Indianapolis	790
Schillinger, George J.....	Indianapolis	2729
Schmalsigang, Gustave A.....	Indianapolis	308
Schmidt, Edward H.....	Indianapolis	3537
Schoenholtz, John J.....	Indianapolis	5067
Schopp, Otto	Indianapolis	1319
Schubert, Harry M.....	Indianapolis	1273
Schubert, M. S.....	Indianapolis	1274
Schulmeyer, L. H.....	Indianapolis	2891
Schulmeyer, Carl W.....	Indianapolis	2277
Schwankhaus, Harry Arthur	Indianapolis	5186
Schwartz, M. P.....	Indianapolis	1968
Schwartz, C. A.....	Indianapolis	1967
Schwenzer, Carl Wm.....	Indianapolis	5238
Scott, W. W.....	Indianapolis	620
Scott, Clinton L.....	Indianapolis	2004
Scott, J. M.....	Indianapolis	2078
Scott, Charles W.....	Indianapolis	1908
Sears, Oscar W.....	Indianapolis	3663
Secord, Norval A.....	Indianapolis	3760
Shake, Homer C.....	Indianapolis	2109
Shaney, Chas. A.....	Indianapolis	3265
Sheets, W. H. H.....	Indianapolis	1272

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Sheets, W. C.....	Indianapolis	2097
Short, Willard N.....	Indianapolis	3533
Siegrist, C. F.....	Indianapolis	1851
Smith, Frank	Indianapolis	3277
Smith, George G.....	Indianapolis	3844
Smith, Lula M.....	Indianapolis	430
Spicely, Harry	Indianapolis	5098
Sprowl, George M.....	Indianapolis	1375
Sproule, James Edward, Jr.....	Indianapolis	2941
Stacy, Joseph L.....	Indianapolis	2483
Stagg, Harvey Duvall	Indianapolis	709
Stammel, Edward W.....	Indianapolis	2030
Stedtfeld, W. C.....	Indianapolis	1006
Steele, Charles Allen	Indianapolis	3053
Steele, Roy Landon	Indianapolis	5196
Stein, Wm.....	Indianapolis	3598
Stephens, John A.....	Indianapolis	1455
Stitt, Leonard G.....	Indianapolis	2467
Stitz, John G.....	Indianapolis	2450
Stockman, Louis S.....	Indianapolis	2091
Stockton, George P.....	Indianapolis	1804
Stokes, John Wesley	Indianapolis	2484
Stokes, Joseph T.....	Indianapolis	2480
Stormout, Ralph M.....	Indianapolis	5118
Stowers, Ernest C.....	Indianapolis	69
Stowers, Jesse L.....	Indianapolis	1275
Stuart, E. Eugene	Indianapolis	421
Stuart, Lenna C.....	Indianapolis	881
Stucky, Edward W.....	Indianapolis	5147
Stuckmeyer, Edward A.....	Indianapolis	1631
Stuckmeyer, John H.....	Indianapolis	1441
Stuckmeyer, William Edward	Indianapolis	2489
Summerville, W. E.....	Indianapolis	1865
Taylor, James M.....	Indianapolis	2972
Thornburgh, Thomas R.....	Indianapolis	262
Thorburn, Albert David	Indianapolis	5347
Thoms, Herman E.....	Indianapolis	310
Timberlake, A.....	Indianapolis	327
Todd, C. Alvan	Indianapolis	5374
Tompkins, J. H. F.....	Indianapolis	2925
Tompkins, Edmund W.....	Indianapolis	1334
Traub, Charles G.....	Indianapolis	3482
Traub, Mary S. E.....	Indianapolis	3481
Traub, Sarah E.....	Indianapolis	2735
Traub, Geo. F.....	Indianapolis	2734
Trees, J. H.....	Indianapolis	2834
Trulock, John F.....	Indianapolis	3675

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Trusler, Charles L.....	Indianapolis	3579
Turner, Edwin D.....	Indianapolis	5262
Twente, Louis F.....	Indianapolis	5328
Vaughn, Alfred W.....	Indianapolis	228
Vestal, Charles E.....	Indianapolis	2743
Vogt, Fred H.....	Indianapolis	1072
Von Tesman, Otto	Indianapolis	1775
Waddell, Minn I.....	Indianapolis	1547
Wagle, Matthew James	New Augusta	2001
Wakefield, Jno. E.....	Indianapolis	1316
Walker, Edwin Teel	Indianapolis	806
Walker, Charles G.....	Indianapolis	3376
Wallace, William H.....	Indianapolis	1701
Walters, Arthur Louis	Indianapolis	5198
Walterhouse, Gillian	Indianapolis	1548
Ward, Frank E.....	Indianapolis	197
Ward, John N.....	Indianapolis	213
Warner, Cortice M.....	Indianapolis	2651
Waters, Frank R.....	Indianapolis	3439
Watkins, Chas. W.....	Indianapolis	2770
Watts, James M.....	Broad Ripple	2371
Watts, Frank E.....	Broad Ripple	2370
Weber, George M.....	Indianapolis	3304
Weber, William C.....	Indianapolis	3694
Weesner, Theodore M.....	Indianapolis	3162
Wehrel, Frank J.....	Indianapolis	3786
Weiss, Theodore Meurer	Indianapolis	2299
Weiss, Carl Christian	Indianapolis	2952
Werner, William F.....	Indianapolis	19
Whitenack, John H.....	Indianapolis	1525
Wiese, L. C.....	Indianapolis	2531
Willeford, Geo. A.....	Indianapolis	3430
Williamson, Wm. N.....	Indianapolis	2319
Wilson, Edgar H.....	Indianapolis	1457
Wilson, Jesse E. M.....	Indianapolis	830
Withers, Oliver P.....	Indianapolis	1652
Witty, James H.....	Indianapolis	3036
Witzel, Frank	Indianapolis	5418
Wheeler, Ernest P.....	Indianapolis	5185
Woodbury, William W.....	Indianapolis	2964
Wysong, Marcus D.....	Indianapolis	846
Yeager, Albert Elton	Indianapolis	3681
Zimmer, Harry E.....	Indianapolis	110
Zimmerman, Charles L.....	Indianapolis	1613

MARSHALL COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Alleman, Harry E.....	Argos	5446
Aspinwall, Novitas B.....	Plymouth	797
Bell, Frederick	Inwood	2329
Blain, Clement F.....	Plymouth	506
Blain, John	Plymouth	519
Bowman, Hiram F.....	Bourbon	3121
Cooper, Hugh M.....	Argos	671
Curran, Mary A. O.....	Bourbon	442
Koontz, Charles E.....	Bremen	2445
Koontz, Frank J.....	Bremen	2447
Lehr, William	Bremen	2428
Leland, John E.....	Plymouth	2939
Martin, Joel F.....	Bourbon	332
Martin, Minnie M.....	Bourbon	331
Matchette, Richard O.....	Bourbon	695
Matchette, A. C.....	Bourbon	443
Parker, Dunham C.....	Argos	1590
Parker, Edward E.....	Culver	1591
Reynolds, Charles	Plymouth	1100
Rinard, J. W.....	Plymouth	393
Shadel, Charles F.....	Plymouth	2316
Rivers, Chas. E.....	Bourbon	5373
Shafer, Abram	La Paz	3784
Slattery, Watie A.....	Culver	444
Slattery, Thomas E.....	Culver	446
Tanner, Frank C.....	Plymouth	1198
Tanner, Lucius	Plymouth	1199
Tanner, Edwin L.....	Plymouth	1197
Wenzler, Fred	Plymouth	1589

MARTIN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Baker, Nina Ross	Shoals	311
Johnson, Mrs. Elsie J.....	Shoals	3855
Johnson, Thomas J.....	Shoals	193
Patterson, J. F.....	Loogootee	2285
Ross, Samuel H.....	Shoals	312
Seal, Bernard	Loogootee	5431
Smith, F. S.....	Loogootee	3822
Walker, George A.....	Loogootee	2286
Wright, Benjamin C.....	Indiana Springs	5014

MIAMI COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Agniss, Merle	Amboy	826
Awalt, George	Chili	1175
Rates, Omer C.	Bunker Hill	2969
Bowman, Reuben	Peru	2368
Brown, Frank D.	Amboy	3001
Cohn, Bert W.	Peru	8
Cox, Emsley F.	Amboy	634
Cunningham, Arthur L.	Bunker Hill	2235
Darnell, William J.	Denver	399
Durkes, William E.	Converse	5257
Emerson, William W.	Converse	3765
Fithian, Mrs. C. E.	Peru	3435
Flavian, E. B.	Peru	2309
Flavien, A. M.	Peru	2318
Freech, Ernest Wilbur	Peru	5363
Gift, Luther R.	Converse	474
Hamaker, M. W.	Peru	661
Haney, Joseph Egbert	Peru	5031
Hosman, Wilbert C.	Akron	2275
Ireland, Alice O.	Mexico	2477
Ireland, T. H.	Mexico	2478
Kratzer, Dr. Eugene F.	Peru	2234
McCarter, Melvin J.	Macy	1153
Macy, Frank	Converse	1049
Malott, Enoch	North Grove	3142
Malsbury, Laughlin O.	Peru	3734
Miller, Carl F.	Peru	1921
Musselman, Frank D.	Macy	1460
Murphy, Roscoe E.	Peru	5408
Piper, Walter L.	Denver	2848
Porter, S. F.	Peru	2788
Porter, Andrew R.	Peru	2787
Porter, Timothy I.	Peru	2789
Schmidt, Henry L.	Peru	690
Shock, Edward A.	Peru	2780
Skinner, Frank	Macy	251
Smith, Guy E.	Peru	381
Snuck, Frederick B.	Peru	5356
Thiebaud, Charles O.	Peru	3331
Vance, Alsey E.	Peru	3733

MONTGOMERY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bittle, Alonzo L.	Wingate	2140
Bittle, J. Luther	Wingate	2155
Booe, John A.	Crawfordsville	1760
Britton, Walter S.	Crawfordsville	306

MONTGOMERY COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bronaugh, James T.....	New Ross	1937
Brown, Lemos L.....	Kirkpatrick	316
Brown, Karl T.....	Crawfordsville	3894
Brown, William S.....	Crawfordsville	3107
Burrin, Thomas E.....	Waveland	927
Burrin, Frank T.....	Waveland	5337
Campbell, Francis W.....	Darlington	88
Carpenter, Samuel W.....	Waveland	1947
Coleman, Will R.....	Crawfordsville	1524
Cook, Geo. D.....	Crawfordsville	182
Davis, Stephen M.....	Waynetown	5439
Dick, Jacob E.....	Crawfordsville	1616
Foster, Thos. J.....	Ladoga	89
Gauld, Gordon R.....	Crawfordsville	1607
Graves, E. M.....	New Ross	2993
Hanna, Charles W.....	Ladoga	5420
Johnson, Frank M.....	New Richmond	572
Kersey, Stephen G.....	Darlington	87
Kostanzer, Raymond E.....	Crawfordsville	1311
Layton, Ed.....	Linden	986
McDonald, Jeff	Crawfordsville	1941
McMillin, Augustus C.....	New Richmond	1472
Morgan, David H.....	Crawfordsville	163
Muriett, Jesse A.....	Crawfordsville	42
Myers, Noah W.....	Crawfordsville	71
Nye, Marshall M.....	Crawfordsville	1759
Runyan, Wildey J.....	Crawfordsville	3221
Savage, Alex V.....	Crawfordsville	5059
Scott, Evan B.....	Linden	2508
Servies, H. D.....	New Market	449
Snoddy, Robert Chalmers	Crawfordsville	5371
Steele, Geo. W.....	Crawfordsville	1310
Stokes, Lorenzo T.....	Linden	580
Venard, T. J.....	Ladoga	72
Venard, Lola A.....	Ladoga	73
White, Alonzo	Alamo	3222
Wilson, Harry	Crawfordsville	712
Yount, Allen C.....	Yountsville	2521

MONROE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bell, John David	Harrodsburg	705
Benton, Arthur Tinsley	Bloomington	5233
Bowles, James A.....	Bloomington	1953
Bowles, W. T.....	Bloomington	1952
Bryant, Roy James	Bloomington	5342

MONROE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Elberson, W. H.....	Bryant	3083
Faris, Albert V.....	Bloomington	3674
Faris, Melville A.....	Bloomington	3673
Flaugher, Fred H.....	Bloomington	102
Fulk, Frederick L.....	Bloomington	5451
Hicks, John E.....	Stilesville	2328
Horner, Oscar L.....	Bloomington	896
Jeffers, H. H.....	Bloomington	3097
Jones, Freeman L.....	Bryant	3081
Maple, Charles O.....	Bloomington	1558
O'Harrow, John W.....	Bloomington	3323
Penrod, Thomas J.....	Bloomington	3429
Rice, Joseph M.....	Bloomington	2620
Sandy, William P.....	Ellettsville	298
Strain, Harry Franklin	Harrodsburg	3704
Wiles, Wood	Bloomington	516

MORGAN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bass, Charles W.....	Martinsville	3716
Bass, George W.....	Mooreville	380
Bass, Frank R.....	Mooreville	379
Byers, H. L.....	Morgantown	2075
Carleton, J. M.....	Martinsville	1292
Clary, L. E.....	Monrovia	3559
Conant, Geo.....	Monrovia	3478
Cooper, Ashley R.....	Mooreville	2009
Cooper, Fred G.....	Mooreville	2008
Hadley, Samuel M.....	Mooreville	3059
Hodson, Harry W.....	Martinsville	2394
Hornaday, John W.....	Mooreville	5143
Johnson, Smith	Martinsville	1088
McMillan, James Paul.....	Medora	5214
McMorris, C. C.....	Hall	1230
Martin, Jesse	Paragon	706
Maxwell, George E.....	Mooreville	416
Murdock, Francis M.....	Brooklyn	1134
Ratts, Thomas J.....	Rattsville	2255
Richardson, John F.....	Martinsville	1678
Rigrish, Frederick Roy.....	Martinsville	5254
Rigrish, D. W.....	Martinsville	493
Tarleton, Edgar	Martinsville	3281
Tarleton, William B.....	Martinsville	1871
Tilford, Benjamin W.....	Martinsville	1089
Tilford, Roy Edgar	Martinsville	1870
Watson, Claude E.....	Martinsville	3868
Wemer, Fred F.....	Morgantown	1691
Winter, William	Martinsville	847

NEWTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Burgess, Hiram	Goodland	1371
Clymer, Glasgo D.....	Goodland	3220
Cooke, John L.....	Goodland	230
Don, Fred D.....	Morocco	3916
Healy, Harry H.....	Kentland	206
Hess, Elmer E.....	Brook	293
Humston, L. Claude	Goodland	2406
Humston, Chas. N.....	Goodland	1288
Humston, Milton L.....	Goodland	1998
Jones, Frank C.....	Goodland	1293
Leedom, Henry F.....	Morocco	3909
McCain, Richard C.....	Kentland	2832
McConnahey, Alton E.....	Morocco	3023
Montgomery, J. N.....	Brook	5175
Pierce, Francis E.....	Goodland	5251
Purkey, Alonzo E.....	Morocco	2306
Purkey, Jesse R.....	Morocco	2305
Recher, Lewis S.....	Morocco	3037
Steele, Eugene S.....	Kentland	536

NOBLE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Beck, Martin C.....	Albion	2034
Bouker, James J.....	La Otto	2843
Chapman, James P.....	Rome City	3383
Cunningham, Henry C.....	Cromwell	1376
Decher, C. J.....	Ligonier	3856
Eldred, Sam'l T.....	Ligonier	137
Fischer, Henry	Kendallville	876
Forrey, Thomas J.....	Wawaka	1181
Harvery, George W.....	Kendallville	784
Hussey, Martin L.....	Cromwell	2353
Hussey, Harry	Cromwell	2351
Klinkenberg, Paul G.....	Kendallville	1491
Knight, Herbert	Kendallville	1023
Lang, Julius W.....	Kendallville	525
Luckey, Thomas A.....	Wolf Lake	1660
Miller, Benjamin E.....	Albion	1459
Miller, Charles Elliott	Albion	2209
Nelson, Charles C.....	Ligonier	2983
Otis, Amos R.....	Kendallville	1297
Raber, Oliver P.....	Kendallville	738
Raber, Ralph L.....	Kendallville	3200
Renahan, Osee Adolphus	Wawaka	1818
Slutz, J. O.....	Ligonier	2935
Snyder, James D.....	Kendallville	1024
Spraudel, Gustav P.....	Kendallville	1490
Stone, R. L.....	Albion	1129

NOBLE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Stone, Harry D.....	Albion	1128
Teal, George B.....	Brimfield	3320
Thrapp, Elmer E.....	Avilla	258
Williams, Samuel J.....	Ligonier	388
Williams, W. A.....	Rome City	686
Woodruff, Ray	Ligonier	2984
Woodruff, Allen	Ligonier	2779

OHIO COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Buchanan, B. F.....	Rising Sun	3902
Hemphill, Joseph P.....	Rising Sun	679
Thorn, David C.....	Rising Sun	2777
Thorn, Lew E.....	Rising Sun	2776

ORANGE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Blocher, Otto B.....	West Baden	5314
Boyd, Chas. L.....	Paoli	3390
Gilliatt, Wm. B.....	Youngs Creek	2083
Knox, Samuel R.....	Paoli	3225
Lindley, James H.....	West Baden	518
Lingle, S. L.....	Paoli	1038
McCoy, William J.....	French Lick	1362
Riley, John P.....	Paoli	913
Sanford, Charlie P.....	Valeene	3862
Sherrod, Margaret L.....	Paoli	370
Sloan, William Willshire	French Lick	2525
Stephenson, Oliver W.....	Orleans	1438
Troth, Will V.....	Orleans	3380
Troth, Robert A.....	Orleans	3379
Witsman, S. W.....	French Lick	1794

OWEN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Asbury, W. H. H.....	Clay City	800
Bowman, F. R.....	Spencerville	2458
Criss, Charles B.....	Lyons	2809
Criss, Riland	Lyons	1440
Dalton, Daniel C.....	Coal City	2324
Dalton, George W.....	Coal City	2325
Dunn, Oliver Edmund	Spencer	2322
Dunn, Lemuel J.....	Spencer	2393
Gallup, Orrie E.....	Spencer	5401

OWEN COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Harris, J. S.	Spencer	2619
Lautenschlager, Christian P.	Patricksburg	2948
Light, Hugh M.	Freedom	2518
Little, B. F.	Quincy	3718
McDonald, David H.	Quincy	918
Moody, O. W.	Coal City	2435
Moss, William G.	Spencer	1640
Peoples, William	Freedom	2007
Sloan, John N.	Spencer	2946
Stevens, Thomas	Freedom	2006

PARKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Benell, Charles	Diamond	3194
Cooper, William Riley	Marshall	1946
Crooks, George B.	Bridgeton	2612
Ellett, Joseph M.	Rockville	183
Haynard, R. H.	Rosedale	227
Hice, Stewart	Diamond	965
Lamb, Henry C.	Bloomigdale	2701
Mendenhall, Ira A.	Mecca	289
Moulton, F. A.	Rockville	1258
Newton, Daniel M.	Lena	58
Ott, Dick H.	Rockville	1124
Phillips, Lewis S.	Judson	1430
Powell, Arthur L.	Montezuma	3251
Stebbins, Fred A.	Montezuma	2048
Wheat, W. W.	Mecca	2215
Withrow, Kate	Diamond	299
Woodard, Oscar	Bloomigdale	1017

PERRY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Beiling, Homer C.	Tell City	5173
Clark, Harry A.	Cannelton	5383
Cummings, Eugene F.	Cannelton	458
Cummings, Elizabeth R.	Cannelton	417
Cunningham, C. E.	Derby	577
Dusch, Gabriel S.	Tell City	1932
Dusch, Mary Louise	Tell City	1931
Gaesser, Theo. T.	Troy	94
Gest, Albion P.	Cannelton	5095
Schreiber, August	Tell City	792
Schrieber, Chas. Darwin	Tell City	5117
Snyder, Earl R.	Troy	5442
Wagner, Emma E.	Cannelton	2575
Wedding, Millard F.	Rome	5086

PIKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adams, McCrillus	Petersburg	3405
Beazley, Elden	Union	106
Cook, Lyman B.....	Velpen	248
Davidson, Ralph B.....	Petersburg	3456
De Tar, David	Winslow	1446
Dillen, Erastus	Winslow	2850
Edwards, Henry S.....	Petersburg	3457
Hendricks, J. B.....	Petersburg	3614
Hilsmeyer, Frederick E.....	Velpen	3774
Kiefer, Thomas F.....	Petersburg	5312
Lorton, John N.....	Spurgeon	3188
May, Edwin W.....	Petersburg	1587
Richards, R. H.....	Patrickburg	1206
Traylor, Wm. Gip	Petersburg	3215
West, James M.....	Petersburg	1608
Woolsey, William S.....	Winslow	2549

PORTER COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Armstrong, Roy D.....	Valparaiso	5390
Bogarte, M. E.....	Valparaiso	3109
Benkie, John G.....	Kouts	90
Collins, Albert L.....	Valparaiso	3418
Heineman, Albert F.....	Valparaiso	3110
Jones, Clinton	Valparaiso	2330
Letherman, W. C.....	Valparaiso	3293
Monroe, Harley R.....	Valparaiso	5392
Morgan, Jno. M.....	Hebron	364
Newland, William H.....	Valparaiso	3417
Nickel, Arthur E.....	Chesterton	5283
Roe, J. Newton	Valparaiso	3111
Sievers, John F.....	Valparaiso	3864
Sievers, Rolla Geo.....	Valparaiso	5294
Smith, Arthur C.....	Valparaiso	1165
Stappenbeck, Henry David	Valparaiso	5309
Sutler, Wilbur M.....	Valparaiso	5484
Thune, Charles C.....	Valparaiso	3565
Wallick, Ben S.....	Valparaiso	5397
Williams, William Henry	Valparaiso	3499
Zimmer, George D.....	Valparaiso	5052

POSEY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Blase, Garland E.....	Mt. Vernon	5367
Dawson, Elbert Eugene	Mt. Vernon	1532
Dawson, Charles	Mt. Vernon	1533
Fogas, Wm. H.....	Mt. Vernon	850

POSEY COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ford, Edwin C.....	New Harmony	5089
Heckmann, Louis	New Harmony	333
Hironimus, Otto	Mt. Vernon	5259
Miller, Frank J.....	New Harmony	438
Miller, J. C.....	New Harmony	439
Millspaugh, Arthur B.....	Mt. Vernon	5364
Montgomery, Karl W.....	Cynthiana	1395
Muehler, Otto H.....	Mt. Vernon	2980
Murphy, Chas. F.....	Griffin	3078
Rosenbaum, David	Mt. Vernon	1468
Rosenbaum, Herman	Mt. Vernon	1467
Schafer, Joseph F.....	Poseyville	5208
Smith, John W.....	Poseyville	1856
Stevens, John Edwin	Cynthiana	5261
Weever, Harold Chas.....	Mt. Vernon	5378
Wheatcroft, Charles H.....	New Harmony	963
Whiting, Ulysses G.....	New Harmony	3818
Wilmuth, William D.....	New Harmony	962
Zerse, Ella	Mt. Vernon	2793
Zerse, O. G.....	Mt. Vernon	2792

PULASKI COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Barker, J. H.....	Pulaski	3783
Blue, Harry Earl.....	Star City	5360
Buck, Jennie	Star City	2310
Buck, F. P.....	Star City	2311
Carper, Mac	Winamac	122
Conn, Solomon, Jr.....	Winamac	915
Jones, Jay	Medaryville	1538
Kelsey, William E.....	Monterey	711
Massey, T. F.....	Medaryville	509
Massey, H. F.....	Medaryville	510
Meeks, J. R.....	Winamac	287
Morlan, Elihu A.....	Francesville	1780
Moreland, Fred L.....	Medaryville	812
Pattison, William D.....	Winamac	120
Prevo, George D.....	Medaryville	811
Rattiff, Leonard M.....	Francesville	1408
Redinbo, Ellis	Medaryville	907
Smith, Elmer W.....	Winamac	3588
Smith, Lindley A.....	Winamac	3589
Thomas, Felix W.....	Winamac	33
Tillett, J. E.....	Francesville	2227
Tillett, Minnie	Francesville	2228

PUTNAM COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Allen, Albert	Greencastle	402
Allen, Walter	Greencastle	387
Allen, William O.	New Maysville	1227
Allen, John W.	New Maysville	1228
Clearwaters, E. C.	Cloverdale	3803
Doll, Elmer B.	Greencastle	3124
Dunlavy, John E.	Greencastle	250
Evans, Thomas E.	Greencastle	1949
Gardner, William Franklin	Russellville	798
Gautier, Conrad C.	Greencastle	2011
Griffith, E. W.	Cloverdale	3263
Horn, Wilson E.	Cloverdale	3241
Irwin, G. W.	Roachdale	744
Jones, William W.	Greencastle	386
McIlvain, W. H.	Bainbridge	3399
McLain, Preston	Greencastle	2475
Miller, Jason R.	Roachdale	3218
Mullinix, Prementer	Greencastle	773
Newgent, O. C.	Russellville	1806
Perkins, Joseph O.	Greencastle	3792
Renick, Henry Silas	Greencastle	3688
Starr, Fred M.	Bainbridge	2673
Starr, G. W.	Bainbridge	700
Utterback, T. C.	Cloverdale	3802
Wilson, John L.	Roachdale	5299
York, A. R.	Cloverdale	5476

RANDOLPH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bailey, La Salle F.	Ridgeville	2697
Bly, Frank J.	Economy	2505
Bly, P. M.	Farmland	2507
Canada, E. N.	Winchester	2924
Canaday, Jonathan A.	Parker	3900
Carver, James M.	Winchester	3646
Coggsball, Geo. R.	Lynn	317
Eastman, C. W.	Winchester	3580
Erouts, Orien E.	Union City	1766
Halliday, William R.	Lynn	1363
Hatfield, Charles M.	Ridgeville	440
Hawley, Linnie B. Summers	Union City	2041
Hawley, W. A.	Union City	2040
Hiatt, L. Haslick	Ridgeville	3343
Johnson, Francis M.	Winchester	1994
Johnson, Oliver H.	Winchester	1993
Johnson, Arthur L.	Farmland	2302

RANDOLPH COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Kendall, Samuel B.....	Losantville	506
Kennon, Orla E.....	Winchester	3644
Kiser, Harry B.....	Winchester	3432
Lollar, Enos	Saratoga	1961
McGunegill, Jared	Modoc	3137
Mason, Samuel P.....	Winchester	2669
Porter, Frank B.....	Parker	5478
Proctor, J. A.....	Union City	1770
Proctor, Charles	Union City	1769
Ruderbaugh, David A.....	Union City	2909
Reed, Chas. E.....	Winchester	5156
Reed, William W.....	Winchester	3315
Reinheimer, Ol.....	Winchester	3584
Rosenbush, John A.....	Union City	1650
Rosenbush, G. A.....	Union City	1651
Sala, Albert F.....	Winchester	1095
Stewart, Carlos R.....	Winchester	490
Stick, Orville L.....	New Pittsburg	930
White, Elmer E.....	Union City	3280
White, J. H. B.....	Winchester	451

RIPLEY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Baas, Mrs. Geo. A.....	Batesville	900
Baas, Geo. A.....	Batesville	901
Bigney, Minnie	Sunman	538
Bigney, Verado W.....	Sunman	537
Blank, Edward J.....	Batesville	5218
Bower, Edmund D.....	Osgood	2931
Carmine, Clinton D.....	Delaware	1425
Gauck, John	Batesville	1698
Kemper, G. R.....	Osgood	2930
Miller, James Herbert	Cross Plains	3766
Miller, Rheuben H.....	Cross Plains	3903
Peters, Chas. N.....	Milan	886
Rockafeller, Wm. H.....	Holton	2721
Schultz, Ed B.....	Batesville	1188
Smith, Sam M.....	Osgood	2710
Smith, Merle C.....	Osgood	5087
Spencer, Benj. F.....	Versailles	3777
Spencer, M. D.....	Versailles	3312
Spencer, John A.....	Versailles	2280

RUSH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Barton, William W.....	Milroy	1407
Davis, Leander T.....	Arlington	3812
Dent, Mattie A.....	Glenwood	2113
Dent, William H.....	Glenwood	1466
Goble, Joseph M.....	Mays	3174
Hargrove, Raymond C.....	Rushville	2017
Havens, Walter	Rushville	1114
Hill, Owen S.....	Carthage	1703
Innis, Robert E.....	Milroy	1303
Johnson, Fred B.....	Rushville	1115
Lytle, Thomas W.....	Rushville	2784
McCarty, Otto C.....	Carthage	5207
McClain, Marion A.....	Carthage	3628
Mullin, Bert A.....	Rushville	2015
Paxton, Isaac N.....	Mays	1313
Pitman, Edward H.....	Rushville	2683
Waite, William J.....	Rushville	2835
Wilson, Charles Frazee	Rushville	5277
Wolcott, Frank E.....	Rushville	649
Wolverton, Harry C.....	Rushville	385

SCOTT COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Harrod, Horace	Scottsburg	84
Hughbouns, Charles H.....	Austin	2768
McClain, Charles E.....	Scottsburg	2098
McClain, William Lee	Scottsburg	5023
McCullough, Fred V.....	Scottsburg	5409
Mace, Lawson N.....	Lexington	2564
Morgan, I. C.....	Austin	3891
Morgan, J. S.....	Austin	3886
Park, Laura C.....	Scottsburg	3204
Park, Frank H.....	Scottsburg	85

SHELBY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adams, Ovid L.....	Shelbyville	1990
Bishop, O. L.....	Shelbyville	860
Buxton, Robert W.....	Shelbyville	2855
Cotton, Edgar B.....	Shelbyville	3359
De Prez, William H.....	Shelbyville	2819
Ensmunger, Charles C.....	Shelbyville	758
Floyd, Richard M.....	Shelbyville	129
Graham, Hugh T.....	Fairland	2111
Hall, Harry O.....	Shelbyville	3117

SHELBY COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Haymond, Jos. A.....	Waldron	3384
Heustis, Stephen H.....	Shelbyville	3325
Hoop, Philip S.....	Shelbyville	5461
Jenkins, Ed E.....	Shelbyville	111
Means, Cornelius B.....	Shelbyville	2820
Schroeder, Conrad	Shelbyville	759
Sherman, Robert E.....	Morristown	5436
Strickler, R. H.....	Boggestown	3437
Totten, Ira B.....	Fairland	713
Van Lue, W. Arthur	Shelbyville	5452
Wrenick, Thomas C.....	Morristown	3513

SPENCER COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bayse, Taylor C.....	Rockport	2578
Garlinghouse, Aurelius D.....	Rockport	3346
Garlinghouse, Franklin B.....	Rockport	3345
Ladd, James W.....	Dale	2919
Ladd, Mary Belle	Dale	2918
Miller, William	Richland City	1831
Niles, George E.....	Chrisney	141
Rhodes, Eden A.....	Chrisney	285
Rigsdale, F. M.....	Grandview	599
Sargent, John A.....	Rockport	3858
Smith, Henry W.....	Rockport	3129
Stuteville, Herbert O.....	Grand View	717

STARKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Auw, M. Joseph	Ora	2088
Bonar, Fred J.....	Hamlet	2231
Brickle, Jerry H.....	Knox	5440
Brown, Frank L.....	Knox	5101
Eatinger, Milo D.....	North Judson	2995
Fuller, Clarence M.....	Knox	2118
Green, Frank Albert	Knox	86
Kellogg, John W.....	Knox	672
Rager, Charles	Hamlet	2121
Wakeman, Leroy B.....	North Judson	5414
Whitmore, William H.....	North Judson	1235

STEUBEN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Abrams, Frank E.....	Ray	265
Black, Ira D.....	Fremont	3367
Brown, Charles	Salem Center	155
Cameron, Robert C.....	Fremont	1309
Dando, George H.....	Orland	34
Davis, Andrew B.....	Hudson	2606
De Caswell L.....	Fremont	675
Frysinger, And.....	Angola	2439
Gibbs, Oliver H.....	Hamilton	3495
Goodale, B. B.....	Metz	1848
Goodale, Ford	Metz	1850
Goodale, Paul	Metz	1849
Hardenbrook, John	Ray	266
Jackman, Charles F.....	Hamilton	1884
Kratz, John E.....	Angola	978
Kratz, Henry E.....	Angola	979
Livingston, John J.....	Freeman	3573
McDonald, Alonzo D.....	Angola	1164
McKeehen, William N.....	Fremont	369
Shank, Erman N.....	Angola	5058
Shank, Henry A.....	Angola	2440
Smith, Marie R.....	Orland	2862
Stout, Andrew J.....	Hamilton	2711
Suifr, Chas. E.....	Hamilton	1883
Van Etta, Harry S.....	Orland	5133
Van Etta, Smith	Orland	3697
Weaver, George J.....	Pleasant Lake	150
Whysong, Clem C.....	Angola	5304
Wyrick, S. R.....	Angola	5441

ST. JOSEPH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adelsperger, Thomas	South Bend	3907
Anderson, Daniel	Mishawaka	939
Applegate, Samuel T.....	South Bend	212
Bastian, Otto C.....	South Bend	733
Berger, Nelson K.....	South Bend	5123
Buzby, Franklin T.....	South Bend	550
Cimmerman, George E.....	South Bend	1962
Coonley, Charles	South Bend	512
Cutshaw, G. W.....	South Bend	2176
Deal, Willis Grant	Wyatt	622
Elliel, Leo	South Bend	267
Endly, Joseph B.....	Walkerton	2498
Fink, Reuben	South Bend	1217
Fink, John J.....	Walkerton	2202

ST. JOSEPH COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Fink, Emanuel A.....	South Bend	1218
Freehafer, Harvey Elmer	South Bend	544
Geyer, Edmund A.....	South Bend	5035
Gitre, Lyster W.....	Mishawaka	5226
Graham, Abner B.....	Mishawaka	1212
Graham, John A.....	Mishawaka	1209
Heil, Frederic J., Jr.....	South Bend	548
Henry, Arthur	South Bend	5389
Hoffman, Edward O.....	North Liberty	1716
Hoffman, John	North Liberty	564
Hoffman, Wm. F.....	North Liberty	563
Huntsinger, Abraham	Mishawaka	2851
Klaer, Otto J.....	South Bend	954
Klaer, Joseph J.....	South Bend	955
Kolupa, Ladislaus A.....	South Bend	5333
Koshland, Herbert I.....	South Bend	168
Kreidler, Louis C.....	South Bend	613
Kuss, Ralph H.....	South Bend	601
Kusel, Fred A.....	South Bend	209
Long, Leonard H.....	South Bend	5195
Louery, Franklin E.....	Granger	3420
Lukens, Bert C.....	South Bend	3055
Mears, L. M.....	South Bend	5152
Meyer, Monroe	South Bend	126
Meyer, Le Roy Everett	South Bend	5379
Milton, Robert P.....	South Bend	639
Niedbalski, V. J.....	South Bend	356
Pabst, Herman E.....	South Bend	795
Papczynski, John W.....	South Bend	735
Patterson, Wm. M.....	South Bend	1031
Pride, Gilbert B.....	Mishawaka	404
Rennoe, William O.....	South Bend	1493
Rensberger, Lester E.....	Lakeville	2728
Rensberger, Clarence S.....	Lakeville	2342
Reyer, Emil	South Bend	793
Rossbacher, A. John	South Bend	1296
Root, Claude	South Bend	5079
Sanborn, Albert H.....	South Bend	1014
Schiffer, Edward A.....	South Bend	546
Schiffer, Herman R. C.....	Mishawaka	511
Schilling, Nicholas	South Bend	736
Senrich, Geo. A.....	South Bend	1192
Smith, Arthur F.....	South Bend	5348
Snoberger, Ira U.....	Walkerton	2565
Snyder, Alfred H.....	South Bend	549
Spohn, Henry L.....	South Bend	3865
Steinel, Edwin H.....	South Bend	5340

ST. JOSEPH COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Steinkohl, Louis J.....	South Bend	5322
Stribel, Frank D.....	South Bend	211
Szybowicz, Leonard	South Bend	355
Van Rie, Leo P.....	Mishawaka	5402
Wagner, Earl P.....	South Bend	719
Warner, Francis D.....	New Carlisle	636
Wawrzou, John S.....	South Bend	734
Weiser, Mary A.....	South Bend	530
Weiser, Daniel D.....	South Bend	531
Weiser, William A.....	South Bend	529
Went, Edward C.....	Mishawaka	5231
Williams, Bert E.....	Walkerton	336
White, Ira	South Bend	353
Wolter, Paul Ernest	South Bend	943
Woods, Ralph H.....	South Bend	923

SULLIVAN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Anderson, Elbert	Carlisle	2513
Barbre, John V.....	Farmersburg	1676
Barnes, Theo S.....	Sullivan	2276
Batey, Charles F.....	Sullivan	2436
Bedwell, Theophilus S.....	Dugger	2290
Bennett, Herschel V.....	Shelburn	5377
Bevis, M. J.....	Hymera	2587
Calvert, Robert	Sullivan	3260
Cummins, William M.....	Hymera	3307
Cummins, Wint	Hymera	3305
Cummins, Delbert E.....	Hymera	3306
Curtner, James F.....	Carlisle	1260
Curtner, William J.....	Carlisle	1070
Gilmore, Albert	Pleasantville	3596
Griffith, J. W.....	Sullivan	2438
Heck, Harry	Farmersburg	2926
Hoover, Nolan C.....	Carlisle	1500
Hoover, Elmer G.....	Carlisle	1502
Hutchison, Theodore W. D.....	Sullivan	2308
Lisman, J. W.....	New Lebanon	1724
McKinley, John Edw.....	Shelburn	3091
Manuel, Asbury H.....	Merom	3736
Mason, Charles	Dugger	1992
Muehler, Emil E.....	Sullivan	321
Newland, John Beach.....	Merom	5009
Parish, Chas.....	Farmersburg	2979
Parker, J. J.....	Merom	477
Reed, Joseph S.....	Sullivan	2437

SULLIVAN COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Smith, William Vorhees	Cass	2199
Smock, Herman H.	Sullivan	374
Smock, Joe K.	Sullivan	373
Stark, Herschel V.	Shelburn	1162
White, Sam A.	Sullivan	2278

SWITZERLAND COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Armstrong, Thomas F.	Florence	3636
Golay, Lawrence W.	Vevay	1802
Olcott, Otis W.	Patriot	1667
Stevens, Edward M.	Vevay	459
Thiebaud, Hugh McCallum	Vevay	2343

TIPPECANOE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Archibald, Joseph G.	Battle Ground	2810
Aurenz, John Daniel	Lafayette	5375
Bartlett, J. D.	Lafayette	2794
Benigna, Sister M.	Lafayette	5149
Bentley, Earl D.	Lafayette	5302
Berghuis, Henry	Lafayette	3618
Best, Frank Merrell	Lafayette	2100
Boswell, Edwin	Lafayette	604
Brown, William W. C.	Lafayette	2655
Bush, Chas. O.	Lafayette	5229
Carson, Joseph E.	West Lafayette	2036
Connors, John W.	Lafayette	5119
Crider, Oliver E.	Buck Creek	1314
Crigler, Thos. B.	Lafayette	5278
Darter, Lee W.	West Lafayette	5370
Davis, Lambert	Lafayette	1557
Davisson, David J.	Lafayette	352
Diehl, August	Lafayette	585
Dorland, Ralph E.	Lafayette	5122
Downing, Chas. S.	Lafayette	1737
Drees, Bert A.	Lafayette	2992
Driscoll, Geo. T.	Lafayette	36
Ebershoff, Frederick H.	Lafayette	2174
Fox, Charles M.	Lafayette	5199
Glick, H. E.	Lafayette	351
Grubb, Bern B.	Lafayette	2905
Haines, Samuel C.	Clarks Hill	3726
Haines, Geo. W.	Clarks Hill	3750
Haywood, Thomas Lowe.	West Lafayette	5088

TIPPECANOE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hilt, David	Lafayette	3743
Hitch, Chauncey R.....	Lafayette	5060
Hogan, W. J.....	Lafayette	5296
Hogan, Thomas N.....	Lafayette	1928
Hogan, John T.....	Lafayette	2245
Hollis, Geo. H.....	Lafayette	5120
Hook, B. M.....	West Lafayette	2795
Hopper, Albert M.....	Lafayette	5125
James, Harry C.....	Lafayette	1927
Johnson, W. W.....	Lafayette	1926
Khith, Adolph F.....	Lafayette	508
Kennedy, Stephen A.....	Stockwell	1745
Knox, Rufus B.....	Lafayette	5391
Kunly, Albert V.....	Lafayette	5084
Liberata, Sister M.....	Lafayette	5150
Lienkaemper, Otto	West Lafayette	775
Lohman, Dietrich H.....	Lafayette	1890
Martin, Chas. W.....	Lafayette	1586
Milligan, S. R.....	Clarks Hill	3741
Milligan, J. W.....	Clarks Hill	3742
Mugg, Dr. Henry M.....	Clarks Hill	3449
Rice, Robert Roy	Lafayette	5061
Schaaf, Otto Benjamin	Lafayette	5146
Schnaible, E. M.....	Lafayette	2179
Schultz, John J.....	Lafayette	59
Schwigler, Rudolph	West Lafayette	776
Shearer, William H.....	Lafayette	5388
Smock, Charles	Lafayette	5077
Snoddy, William J.....	West Lafayette	1471
Spring, Robert Burr	Lafayette	1078
Stewart, Joseph Henry	Colburn	1266
Vawter, Wm. H.....	Lafayette	1722
Vellinger, Warren Albert	Lafayette	5291
Walters, William J.....	Battle Ground	2811
Wells, Albert A.....	Lafayette	2101
Whitsel, Wm. C.....	Lafayette	2211
Widmer, Fred R.....	Dayton	1458
Wiltshire, Leonard C.....	Lafayette	319
Wood, Chase	Lafayette	252
Yeager, Emory J.....	Lafayette	1936

TIPTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ballenger, John E.....	Sharpsville	2522
Cooperider, Elison	Kempton	3043
Dennis, Colonel E.....	Windfall	1833
Downing, Thomas P.....	Hobbs	187

TIPTON COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hinkle, Adam J.....	Goldsmith	448
Lindsay, James C.....	Tipton	465
Lindsay, William Sherman.....	Sharpsville	3454
Mehlig, M.....	Tipton	2129
Mehlig, Henry	Tipton	2128
Mood, James	Tipton	196
Moore, Azro F.....	Tipton	463
Moore, Bernard V.....	Tipton	3425
Moore, A. M.....	Tipton	462
Murphy, J. H.....	Kempton	2613
Prugh, Jefferson	Kempton	3210
Rosenthel, Simon	Tipton	408
Schell, Elmer P.....	Windfall	2167
Snyder, Oliver T.....	Sharpsville	2876
Speckbang, Lewis	Tipton	5488
Vawter, Frank S.....	Tipton	464
Warne, Charles H.....	Hobbs	185

UNION COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Barkley, Jno. Clark	West College Corner	2665
Carter, Frank	Liberty	3682
Richardson, Harry Gilbert	Liberty	1180
Tappen, Charles S.....	Liberty	1179
Trembly, Daniel S.....	Liberty	3022
Verner, Augustus	Liberty	3705

VANDERBURGH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Barnett, Moses	Evansville	1073
Beard, Chas. P.....	Evansville	2803
Beiling, Harry L.....	Evansville	1388
Bessel, Louis	Evansville	281
Bessel, Bertha	Evansville	282
Bohn, George W.....	Evansville	101
Böhrer, Otto	Evansville	1495
Bomm, Prosper X.....	Evansville	1755
Bomm, Leonard C.....	Evansville	1756
Borgman, J. H., Jr.....	Evansville	1268
Borgman, Pauline	Evansville	1269
Brannock, Benj. B.....	Evansville	119
Brinker, Henry J.....	Evansville	1576
Brinker, Hulda	Evansville	3300
Brown, Leonard	Evansville	507
Brown, George W.....	Evansville	280

VANDERBURGH COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bussing, B. J.....	Evansville	2758
Corson, Joseph H.....	Evansville	1145
Currey, Alice A.....	Evansville	1249
Currey, Leon	Evansville	579
Epmeier, Wm. F.....	Evansville	2205
Fischer, Louis	Evansville	1221
Forster, Maggie	Evansville	1575
Forster, Chas. F.....	Evansville	655
Freeman, James Francis	Howell	3165
Freeman, Frank W.....	Howell	3165
Fritsch, Wm.....	Evansville	1829
Gerard, Richard J.....	Evansville	1178
Gerke, Theodore	Evansville	863
Gottman, Chas. V.....	Evansville	1186
Haynie, George W.....	Evansville	3308
Hecht, David	Evansville	5170
Hermann, F. W.....	Evansville	476
Holfelner, Albert John	Evansville	2072
Hurst, Oscar W.....	Evansville	1754
Hut, Clemens H.....	Evansville	989
Hut, Clemens T.....	Evansville	990
Illing, William A.....	Evansville	435
Illing, Ernst F.....	Evansville	434
Inco, Charles Edward	Evansville	861
Kappler, John G.....	Evansville	2039
Kempf, H. W.....	Evansville	1267
Kerth, Alexander H.....	Evansville	1419
Lambert, J. P.....	Evansville	2214
Laval, Edw. J.....	Evansville	1247
Laval, Henry	Evansville	651
Laval, William	Evansville	650
Lorenz, John W.....	Evansville	654
Lorenz, Sophia A.....	Evansville	653
Meek, Walter Harry	Evansville	225
Mendenhall, John C.....	Evansville	799
Moog, Wm. G.....	Evansville	2807
Mueller, J. O.....	Evansville	433
Mueller, C. Robert	Evansville	852
Muller, Ben S.....	Evansville	335
Mutschler, Emil	Evansville	1074
Patterson, A. R.....	Evansville	2516
Pelz, Charles Theo.....	Evansville	652
Petersheim, John F.....	Evansville	1220
Petersheim, F. M.....	Evansville	1219
Pirnat, R. J.....	Evansville	3392
Ralston, Chas. N.....	Evansville	3664
Ralston, Indie B.....	Evansville	3665

VANDERBURGH COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Reese, Geo. C.....	Evansville	1505
Riley, Harry H.....	Evansville	5129
Saupert, E. T. E.....	Evansville	2012
Schlaepfer, August J.....	Evansville	1504
Schmits, Gerhard H.....	Evansville	1453
Schulte, Walter H.....	Evansville	5209
Schwab, Milton G.....	Evansville	5104
Schulz, Chas. G.....	Evansville	1250
Sheridan, Merrett A.....	Evansville	1503
Sieffert, Frank W.....	Evansville	376
Tepe, Geo. W.....	Evansville	1454
Tepe, Mary A.....	Evansville	96
Tepe, Harry A.....	Evansville	97
Tepe, Louis	Evansville	98
Vanstone, Francis	Evansville	3309
Walden, Chas. M.....	Evansville	1387
Ver Wayne, Joseph H.....	Evansville	305
Wilderman, George F.....	Howell	848
Weber, William	Evansville	436
Wells, John H.....	Evansville	166
Wolfgang, Louis	Evansville	1224
Wolfgang, John W.....	Evansville	1225
Wood, Charles Edwin	Evansville	1361
Wyttenbach, John	Evansville	243
Zapp, A. J. Colburn	Evansville	528

VERMILLION COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bence, James Franklin	Clinton	5136
Boor, H. Moffett	Cayuga	1670
Boor, James R.....	Cayuga	1671
Bryant, John C.....	Perryville	1791
Burns, Hardy W.....	Newport	2402
Campbell, Thomas	Clinton	761
Collett, Fred D.....	Newport	216
Conaway, Daniel	Cayuga	1853
Crane, James C.....	Clinton	2208
Frazier, Albert	St. Bernice	6
Garrison, E.....	Newport	3125
Gillis, James C.....	Clinton	1534
Grooves, J. B.....	Newport	2493
Haddon, Jesse E.....	Dana	2190
Hammersley, Clifford M.....	Clinton	5484
Harlan, Joseph	Dana	1776
McNeill, William K.....	Perryville	1790
Morey, Wm. L.....	Clinton	760

VERMILLION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Morgan, Harmon K.....	Clinton	5487
Sanders, F. E.....	Perryssville	1789
Smith, Andrew	Dana	668
Stephens, Edgar R.....	Newport	2494
Turner, Frank	Newport	3381
Walker, Giles D.....	Clinton	1172
Walker, Frank W.....	Clinton	1171
Washburn, Aquila A.....	Clinton	3771
Wolfe, Charles S.....	Dana	5

VIGO COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Allen, James L.....	Terre Haute	5425
Allen, Emelia	Terre Haute	764
Anderson, Sheldon S.....	Terre Haute	1321
Armstrong, Fred	Terre Haute	1185
Asperger, Fred H.....	Riley	1169
Austin, Alfred B.....	Terre Haute	135
Averitt, Carl H.....	Terre Haute	1357
Ball, Joseph M.....	Terre Haute	3853
Baur, Arthur	Terre Haute	136
Bear, Will H.....	Terre Haute	1508
Berry, Geo. W.....	West Terre Haute	935
Bindley, John Bruce	Terre Haute	3067
Bindley, Edward H., Jr.....	Terre Haute	3820
Black, James H.....	Terre Haute	2273
Black, Frederick Lee.....	Terre Haute	2126
Blair, Wm. M.....	Terre Haute	5107
Bourne, Earl S.....	Terre Haute	5468
Brunner, Joseph F.....	Terre Haute	5221
Buntin, Wm. C.....	Terre Haute	1320
Burns, Joseph B.....	Terre Haute	1270
Butler, Sam'l Goode	Terre Haute	2268
Butsch, John Louis	Terre Haute	2517
Caldwell, Clifford B.....	Terre Haute	5345
Carpenter, George Chester	Terre Haute	5217
Carter, John E.....	Terre Haute	1111
Cassaday, Burton	West Terre Haute	766
Coffey, Edgar	Terre Haute	967
Compton, Frederick S.....	Terre Haute	555
Cook, John V.....	Terre Haute	1527
Cook, Louie M.....	Terre Haute	3104
Corey, George W.....	Terre Haute	5449
Cox, David P.....	Terre Haute	1239
Crabb, Jervis A.....	Terre Haute	2262
Curry, George A.....	West Terre Haute	767

VIGO COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Denison, Jasper D.....	Terre Haute	1294
Donneily, Le Roy.....	Terre Haute	3319
Donnelly, Wm. M.....	Terre Haute	892
Donnelly, Angelina Pratt	Terre Haute	891
Duncan, Harry H.....	Terre Haute	1353
Dunningan, Augustin J.....	Edwards	172
Easterday, William Edwin	Terre Haute	45
Ellis, Geo. S.....	Terre Haute	1176
Faust, Edwin	Terre Haute	1628
Fears, William L.....	Terre Haute	1075
Forster, Harry	Terre Haute	326
Foulkes, Stephen Harvey.....	Terre Haute	1836
Gable, Howard F.....	Terre Haute	870
Gantz, Willard C.....	Terre Haute	1498
Geiger, W. S.....	Terre Haute	4
Graham, Joseph L.....	Riley	3808
Hampton, Edward	Terre Haute	1564
Harrold, J. C. N.....	Lewis	1377
Harrold, Jesse S.....	Lewis	3336
Haupt, Chas. A.....	Terre Haute	803
Haworth, Isaiah	Atherton	3768
Herber, Conrad J.....	Terre Haute	2143
Heuer, William P.....	Terre Haute	1411
Hoffman, George W. J.....	Terre Haute	1355
Irwin, M. W.....	Terre Haute	942
Jalbert, Virgil	Terre Haute	5457
Jett, Frank H.....	Terre Haute	1894
Johnson, John B.....	Sandford	982
Johnson, Emil A.....	Terre Haute	1032
Johnson, Alfred P.....	Terre Haute	5272
Joyner, C. E.....	Terre Haute	2671
Kadel, Edward Adam	Terre Haute	2431
Kadel, Otto N.....	Terre Haute	5157
Kauffman, Henry E.....	Terre Haute	1372
Kensink, Wm. B.....	Terre Haute	5384
King, J. Dillon	Terre Haute	160
Kohl, Grover Chalmer	Terre Haute	5235
Krietenstein, George W.....	Terre Haute	2684
Krietenstein, Carl	Terre Haute	2676
Krietenstein, Will L.....	Terre Haute	2685
Lammers, Edward S.....	Terre Haute	149
Leek, James O.....	Fontanet	2677
Leek, C. C.....	Terre Haute	2682
McJohnston, Willard E.....	Terre Haute	5000
McClure, Harry L.....	Terre Haute	5293
Madison, Joseph S.....	Terre Haute	739
Manley, John E.....	Terre Haute	3066

VIGO COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Mayer, Joseph A.....	Terre Haute	1734
Middleton, Leonard William	Terre Haute	5369
Minnick, John W.....	New Goshen	3566
Moore, Frederick A.....	Terre Haute	1389
Murphy, Walter D.....	Terre Haute	2303
Nacke, Anthony	Terre Haute	3749
Nehf, Dena	Terre Haute	2023
Neukom, Albert	Terre Haute	2945
Neukom, William J.....	Terre Haute	902
Neukom, Henry C.....	Terre Haute	3881
Osburn, Arthur A.....	Terre Haute	5227
Parsons, Fred H.....	Terre Haute	5202
Raabe, Ernest	Terre Haute	1059
Rains, Bert	Terre Haute	5273
Randel, Harry Clay	Terre Haute	5159
Reiss, George	Terre Haute	3914
Reynolds, Charles G.....	Terre Haute	802
Rhoades, H. B.....	Terre Haute	2761
Riddle, Frank J.....	Terre Haute	669
Robinson, E. H.....	Terre Haute	5013
Sale, Edmund T.....	Terre Haute	2894
Schlaman, Herman L.....	Terre Haute	247
Schonfeld, August C.....	Terre Haute	5191
Sheckel, Jas. B.....	Sandford	983
Somes, James E.....	Terre Haute	46
Spain, Robert T.....	Terre Haute	5466
Spaulding, Thomas	Terre Haute	2822
Spaulding, Laura H.....	Terre Haute	2821
Stalcup, John B.....	Terre Haute	3029
Taber, Mont C.....	Terre Haute	5102
Terstegge, Joseph H.....	Terre Haute	2147
Thornton, John F.....	Terre Haute	3349
Travioli, Herbert B.....	Terre Haute	2293
Ulrich, M. B.....	Terre Haute	5317
Waggouer, Wm. D.....	Terre Haute	1356
Waggoner, Simeon	Terre Haute	703
Waters, Henry H.....	Terre Haute	1410
West, Charles Wood	Terre Haute	1354
White, John T.....	Terre Haute	2263
Willison, John A.....	Terre Haute	3092
Zimmerman, Herman	Terre Haute	325
Zimmermann, T. A. G. A.....	Terre Haute	1240

WABASH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ader, Henry	Somerset	323
Bachman, Karl Robert	Wabash	5422
Baker, Sherman M.	Roann	1279
Bechtol, Clarence I.	North Manchester	362
Bradley, Chas. E.	Wabash	2363
Bradley, Clarence	Wabash	2361
Bright, John	Wabash	5114
Butterbaugh, O. L.	Wabash	2364
Carr, Charles T.	Wabash	716
Clark, Rowland E.	Wabash	2585
Clark, Walter C.	Wabash	3473
Criswell, George W.	La Fontaine	1687
Dare, Hugh H.	La Gro	270
Fowler, Wm. R.	Wabash	2365
Gackenhimer, Emanuel	Wabash	1593
Gaylord, James E.	Wabash	35
Geyer, George U.	La Fontaine	1771
Harter, Joseph B.	North Manchester	1346
Johnson, John L.	La Fontaine	721
Keefer, Edward J.	North Manchester	2883
Lautzenhiser, David D.	North Manchester	570
McPherson, Chas. W.	Wabash	5234
Malsbury, A. A.	Somerset	322
Morris, Uriah S.	Wabash	631
Porter, Arch B.	La Gro	271
Renner, Maley E.	Urbana	3557
Swadley, Edgar W.	Wabash	632
Swadley, George W.	Wabash	630
Updegraff, Harry H.	Wabash	2367
Vigus, S. E.	Wabash	3428
Weber, Wilson Henry	Roann	1284
Williams, Jirah B.	North Manchester	3056
Wooley, John W.	Wabash	3122

WARREN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Barger, William	State Line	1559
Donavan, Albert B.	Williamsport	357
Hall, Isaac L.	West Lebanon	1639
McFaren, Arnet	Independence	2391
McFeren, Joseph	Independence	2390
Miller, James M.	West Lebanon	2221
Nail, Will S.	Marshfield	1012
Phillips, E. L.	Pine Village	1796
Powell, A. M.	Williamsport	2047
Winger, Benjamin J.	Williamsport	5256

WARRICK COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Aurt, Frederick Thos.....	Tennyson	2380
Brizius, Herman	Newburgh	5438
Butts, F. E.....	Elberfeld	189
Dongan, Isaac M.....	Selvin	3885
Fiebig, Louise	Boonville	1452
Fulling, Frank B.....	Boonville	2201
Lacke, Edward H.....	Newburgh	2656
McVey, W. H.....	De Gonia Springs	2297
Owens, Lot W.....	Boonville	1675
Thomas, J. C.....	Boonville	1707
Wilde, Dr. G. O.....	Boonville	1451
Zimmerman, Jonathan	Lynnville	1672

WASHINGTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Anderson, O. Bela	Salem	5135
Apple, Anderson	Salem	3653
Dennis, Lewis	Salem	637
Hancock, George S.....	Campbellsburg	1732
Hancock, Oscar L.....	Campbellsburg	1733
Lane, Nathan J.....	Campbellsburg	2542
McClintock, Charles	Salem	3239
McClintock, Arthur C.....	Salem	5154
Ray, Simon S.....	Fredericksburg	5097
Robertson, Reuben B.....	Salem	2510
Robertson, Charles A.....	Salem	5423
Rudder, Miss L. D.....	Salem	5163
Rudder, Wm.....	Salem	1437
Rudder, Wm. H.....	Salem	1436
Shanks, William C.....	Salem	3240
Vellom, Lemuel	Saltillo	3297

WAYNE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adams, J. L.....	Richmond	1510
Allen, John B.....	Cambridge City	3701
Beard, Clayton Riley	Cambridge City	2511
Beard, John W.....	Cambridge City	1995
Beppert, Adolph	Richmond	40
Best, Harry T. S.....	Richmond	1330
Bowmaster, M. L.....	Cambridge City	2326
Browne, Le Roy E.....	Richmond	2922
Callaway, Charles H.....	Milton	202
Callaway, George E.....	Cambridge City	2104

WAYNE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Carpenter, Bertram A.....	Hagerstown	3506
Clements, James H.....	Williamsburg	3238
Curry, F. F.....	Richmond	1018
Dickinson, William H.....	Richmond	5206
Dye, Edw. E.....	Richmond	2377
Fihe, Leo H.....	Richmond	1509
Fosler, John	Richmond	5071
Fouts, John M.....	Centerville	5426
Fulghum, Chas. C.....	Fountain City	1808
Harrison, Charles A.....	Richmond	1351
Heiner, Edgar K.....	Hagerstown	1348
Hiatt, James A.....	Richmond	3487
Hollin, J. W.....	New Richmond	3189
House, Andrew Dean	Cambridge City	1731
Johnston, William A.....	Cambridge City	1720
Luken, Augustus G.....	Richmond	2189
Luken, John H.....	Richmond	2553
McDonnell, Frank C.....	Richmond	678
McDonnell, Thomas F.....	Richmond	677
McRoberts, Alva A.....	Richmond	5127
Magaw, Charles L.....	Richmond	576
Murdock, Luther J.....	Greensfork	611
Parkins, William L.....	Milton	81
Quigley, Michael J.....	Richmond	1644
Quigley, James A.....	Richmond	1645
Ramler, Edward W.....	Richmond	2552
Reynolds, Addison C.....	Williamsburg	3576
Richey, Mrs. Laura J.....	Cambridge City	2065
Roark, Charles Asbury	Milton	5141
Ross, Paul L.....	Richmond	1107
Ross, Louis F.....	Richmond	1108
Scull, William	Richmond	5139
Snyder, Wm. Temple	Richmond	154
Sourbier, B. F.....	East Germantown	1256
Starr, M. F.....	Hagerstown	3507
Stonecipher, J. H.....	Hagerstown	3872
Sudhoff, William H.....	Richmond	1160
Sudhoff, Gustave H.....	Richmond	1159
Thistlewaite, Clem	Richmond	3519
Toler, Hilbert H.....	Richmond	2917
Torbeck, Joseph H.....	Richmond	3494
Walker, Terry S.....	Hagerstown	3583
Weber, Fred E.....	Centerville	2639
Weber, William H.....	Richmond	3839
Wills, John B.....	Cambridge City	3348

WELLS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bonham, Carl	Bluffton	3634
Buyse, Philip Edward	Bluffton	125
Davenport, Louis C.	Bluffton	1278
Dean, Chas. C.	Bluffton	292
Ehle, Frank E.	Bluffton	730
Fryer, Frank H.	Poneto	2608
Funk, John B.	Liberty Center	542
Guttelin, Wm. A.	Bluffton	3338
Hoopengardner, Frank P.	Ossian	2136
Hoover, John H.	Ossian	1885
Hunter, Harry C.	Zanesville	2990
Karns, Lewis J.	Bluffton	588
Kelly, Chalmers F.	Focsin	3778
Kelly, Arthur P.	Tocsin	3772
Kramer, Jesse W.	Bluffton	1057
Long, Jacob Albert	Bluffton	1277
Mannes, Wm. D.	Ossian	5171
Miller, G. B.	Bluffton	1403
Morgan, Thurlow W.	Bluffton	5307
Mowry, E. J.	Bluffton	3709
Nelson, H. B.	Bluffton	2932
Spivey, James R.	Bluffton	291
Stout, M. A.	Bluffton	2266
Sturgis, John E.	Bluffton	1056
Waid, James M.	Uniondale	318

WHITE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Baker, Charles W.	Wolcott	754
Bowman, Fred E.	Monticello	2259
Brown, James D.	Burnettsville	1991
Bruss, T. N.	Brookston	2594
Bryan, W. A.	Idaville	1116
Casad, Frank	Monticello	1929
Connell, John M.	Monticello	2258
Corson, J. Albert	Monticello	2301
Handley, Willis D.	Monon	2524
Hart, F. E.	Wolcott	1476
Hinshaw, Elijah P.	Headlee	2604
Jenning, Fred	Brookston	2617
Jenning, Pairesade	Brookston	2618
Jenning, Guy G.	Brookston	2616
Kneale, John H.	Brookston	2593
Kneale, Henry	Brookston	3597
Meiser, J. W.	Monticello	5460
Nordyke, Robert	Wolcott	1475

WHITE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Sluyter, Samuel D.....	Chalmers	1803
Spencer, Ruel	Wolcott	1544
Spencer, Edgar	Wolcott	1546
Timmons, Charles Warren	Wolcott	5204
Tuck, Mrs. N. T.....	Wolcottville	904
Tuck, James	Wolcottville	905
Wagner, John H.....	Winamac	3467

WHITLEY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Berry, John E.....	Larwill	188
Brand, John W.....	Columbia City	195
Craig, A. B.....	Churubusco	2936
Deems, Warren Jay	Laud	1624
Eikenberry, Mary	Churubusco	3915
Erdmann, Edward E.....	Columbia City	5279
Garrett, Edward L.....	Larwill	1602
Hildebrand, Edgar N.....	Columbia City	467
Ireland, Homer A.....	Columbia City	194
Meier, John W.....	Columbia City	565
Meitzler, Frank	Columbia City	133
Norris, W. F.....	South Whitley	3811
Norris, O. R.....	South Whitley	3922
Pontius, George Allen	Columbia City	74
Scott, Durant C.....	South Whitley	1130

ASSISTANT REGISTERED PHARMACISTS

ARRANGED BY COUNTIES ALPHABETICALLY.

ADAMS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Augsburger, Aaron C.....	Berne	60
Hoffmann, Oral V.....	Linn Grove	22
Pelham, Frank E.....	Geneva	826

ALLEN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Barney, G. D.....	Fort Wayne	728
Bentz, Chas. E.....	Fort Wayne	89
Cummins, Charles E.....	Harlan	228
Gunn, John H.....	Fort Wayne	786
Jordan, Clyde B.....	Fort Wayne	707
Koehlinger, Philip Jacob William.....	Fort Wayne	678
Martin, Adison L.....	Fort Wayne	834
Miller, Charles H.....	Fort Wayne	659
Miller, Emanuel B.....	Fort Wayne	316
Noll, Geo. M. S.....	Fort Wayne	241
Spiegel, Wm. H.....	Fort Wayne	630
Stone, Harry B.....	Fort Wayne	640

BARTHOLOMEW COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bryer, S. W.....	Hope	504
Criswell, William H.....	Churubusco	721
Dalmbert, Carl A.....	Hope	291
McClintic, A. M.....	Hartsville	529
McKnight, Noble C.....	Columbus	27
Stahlhuth, Minnie	Columbus	52

BLACKFORD COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bonge, Walter F.....	Hartford City	184
Cronin, William B.....	Hartford City	191
Emshwiller, Fred O.....	Montpelier	269
Kelly, Roy J.....	Roll	77
Marine, Pearl Dilloran	Hartford City	571
Scott, Kraston P.....	Hartford City	802
Sellus, Chas. A.....	Montpelier	305

BENTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hunter, Elizabeth S.....	Raub	29
Taylor, Wilbur C.....	Ambia	179
Ward, Frank J.....	Otterbein	806

BOONE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Clements, Chas. F.....	Jamestown	267
Lutz, James O.....	Zionsville	219
Kenworthy, Harry L.....	Lebanon	302
Marker, Ernest	Jamestown	670
Slusser, Charles A.....	Lebanon	182
Wrinborough, Geo. K.....	Lebanon	798

BROWN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Genolin, Charles	Nashville	633

CARROLL COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Beck, Barton V.....	Burlington	832
Thomson, Chas. W.....	Flora	587

CASS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Garver, Edison M.....	Logansport	562
Lybrook, Roland V.....	Logansport	825
Pearson, Ernest T.....	Logansport	262
Porter, Benjamin	Logansport	244
Weaver, Edward L.....	Logansport	363
McFarland, Carl C.....	Logansport	830

CLARK COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Deibel, H. Rudolph	Jeffersonville	157
Stalker, Elmer E.....	Charlestown	631

CLAY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Englehart, George L.....	Brazil	792
Glenn, Robert A.....	Brazil	170
Kellar, Chas. Frederick	Brazil	394
Morton, Anna M.....	Knightsville	257
Talbott, William E.....	Bowling Green	337
Ury, Julian J.....	Center Point	537

CLINTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adams, William R.....	Frankfort	222
Ashpaugh, Chas. A.....	Frankfort	146
Bryant, James H.....	Frankfort	296
Gentry, James D.....	Forest	563
Heaton, Ruby F.....	Scircleville	645
Roudebush, Benj. F.....	Frankfort	719
Swayzee, Chas. E.....	Forest	814
Young, Garth Bernard	Frankfort	614

DAVISS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hunemeier, Iva	Washington	261
Laughner, Clyde Otto	Whitestown	258
Lauberson, Henry	Michigantown	124

DEARBORN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Helms, Allen A.....	Dillsboro	784
Walter, Flora M.....	Lawrenceburg	81

DECATUR COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ballard, Anna F.....	St. Paul	358
Guthrie, Guy H.....	Greensburg	568
Hazelrigg, Dora	Adams	349
Hunter, Herbert Calvin	Greensburg	807
Magee, Addison R.....	Greensburg	613

DEKALB COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Davenport, Sam F.....	Auburn	556

DELAWARE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adelsperg, Bernard E.....	Muncie	147
Barton, J. N.....	Eaton	252
Berry, Claude E.....	Muncie	256
Canon, Charles E.....	Muncie	780
Cecil, Herman M.....	Muncie	604
Everroad, Harry Clyde	Muncie	188
Gough, Cecil R.....	Muncie	770
Greer, J. Fennimore	Yorktown	255

DELAWARE COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Harrison, Charles W.....	Albany	326
Hooke, Hugh A.....	Muncie	714
Kelly, John R.....	Muncie	584
Nihart, Arthur A.....	Albany	788
Stevens, Louis M.....	Muncie	266
Whitley, James B.....	Muncie	768

DUBOIS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brundick, Martha A.....	Huntingburg	347
Schwartz, Emma M.....	Huntingburg	327
Schwartz, Esther Anna	Huntingburg	328
Schwartz, Carl H.....	Huntingburg	295
Stork, Emma	Holland	193

ELKHART COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Beaver, Harry William	Elkhart	799
Bentz, Frank H.....	Elkhart	102
Goldman, Harry H.....	Elkhart	44
Kurtz, Edward W.....	Goshen	740
Niswander, Clyde R.....	Goshen	216
Stauffer, W. A.....	Elkhart	51
Wall, Claude D.....	Elkhart	612

FAYETTE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Murray, John G.....	Connersville	663
Nungister, Harry A.....	Connersville	789
Perin, Roscoe C.....	Connersville	664
Sefton, Frank Hyde	Connersville	282

FLOYD COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Austin, Mary T.....	New Albany	297
Devol, Charlotte	New Albany	67
Knoefel, J. Oscar	New Albany	811
Owens, H. B.....	New Albany	118
Phelps, Roby Holmes	New Albany	720
Rockenbach, Rud. H. R.....	New Albany	3
Stockdell, Catherine	New Albany	330
Tucker, George S.....	New Albany	114
Von McCullough, Frank	New Albany	655

FOUNTAIN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Butts, Will L.....	Veedersburg	30
Hedges, Fred	Covington	173
Kessens, Walter B.....	Wallace	98
McMahon, J. Steely	Attica	803
Rainier, Thos. Ed.....	Covington	517

FRANKLIN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Carter, Margarette M.....	Brookville	823
Muchmore, Chas. K.....	Laurel	137

FULTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Biggs, William M.....	Kewanna	638
Gift, George H.....	Rochester	783

GIBSON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hopkins, Jas. Stork	Princeton	696
Nash, Thomas B.....	Princeton	221
Phillips, Oscar	Hazleton	528
Runcie, Viola	Fort Branch	312
Sisson, Raymond S.....	Hazleton	764
Trippet, Edith Kightly	Princeton	279

GRANT COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Appleman, Alvaris S.....	Marion	299
Edwards, Xan H.....	Fairmount	605
Hazen, R. Parke	Marion	705
Lawshe, Charles H.....	Swayzee	620
Mayberry, Wilber H.....	Gas City	303
Paullus, John L.....	Marion	399
Smith, Herbert B.....	Marion	785
Wright, Clifton E.....	Sims	273

GREENE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
McIntosh, D. C.....	Worthington	767

HAMILTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Callings, Ray I.....	Cicero	223
Hopkins, R. L.....	Arcadia	581
Rodenbeck, Chas.....	Arcadia	718
Wall, Henry O.....	Noblesville	47

HANCOCK COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Chandler, J. O.....	McCordsville	254
Fort, Claude W.....	Greenfield	776
Grunden, Will P.....	Willow Branch	155
Houck, Clarence D.....	Shirley	250
Pusinelli, John A.....	Shirley	781
Rucker, Jesse S.....	Greenfield	592
Short, Harry.....	New Palestine	214
Whetzel, Paul D.....	Greenfield	756

HARRISON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Griffin, Daniel P.....	Corydon	694
Fleshman, Christina R.....	Mauckport	160
Taulman, Webster	Corydon	666
Wolpert, L. J.....	Elizabeth	112

HENDRICKS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Anderson, August	North Salem	129
Hendricks, John De Witt.....	Lizton	507
Kelleher, A. G.....	Danville	237
Martineau, Fred W.....	Danville	679
Neiger, John P.....	Danville	236

HENRY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Benedict, Grace L.....	Springport	9
Boor, Howard H.....	New Castle	158
Cummins, Joseph P.....	Middletown	284

HOWARD COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Gerhart, Frank H.....	Kokomo	636
Hearrington, Howard Judson	Kokomo	800
Jay, Joe P.....	Kokomo	653
McLaughlin, Chas. W.....	Kokomo	33

HOWARD COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Manring, Clarence D.....	Greentown	642
Sanders, Charles P.....	Kokomo	134
Shull, Lonzo L.....	Kokomo	683
Ulmer, Leslie J.....	Kokomo	647

HUNTINGTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Campbell, Albert William	Huntington	652
Kilander, William J.....	Markle	212
Lawrence, Ora A.....	Warren	375
Leonhardt, Elmer P.....	Bippus	602
Reiter, Wm. Detrick	Huntington	389

JACKSON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Greger, Chas. E.....	Tampico	543
Osterman, Henry	Seymour	382
Nelson, Ira A.....	Crothersville	818
Payne, Horace	Mooney	314
Rucker, S. G.....	Seymour	794

JASPER COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Jensen, Thomas	Wheatfield	778
O'Connor, Thomas Martin	Remington	715

JAY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Black, Ruth	Blaine	365
Cunningham, Bertha J.....	Dunkirk	226
Hoppes, Jesse C.....	Redkey	769
Rour, Minerva J.....	Portland	117
Shull, Guy E.....	Bryant	231
Waltman, Caroline L.....	Dunkirk	207
Wilt, Harry Lowell	Portland	552

JENNINGS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Dils, J. M.....	North Vernon	387

JOHNSON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bishop, William C.....	Greenwood	95
Dailey, George W.....	Whiteland	185
Drybread, Charles H.....	Franklin	830
McCollough, Herbert	Franklin	240

KNOX COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Albert, W. H.....	Freelandville	132
De Priest, Homer C.....	Vincennes	749
Fox, Harmon B.....	Bicknell	662
Kramer, Otto F.....	Vincennes	19
Morris, Robert Allen	Vincennes	577

KOSCIUSKO COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Adams, Ernest M.....	Warsaw	761
Antonides, Earl D.....	Warsaw	178
Baker, Edgar D.....	Warsaw	738
Bickel, Harry Elvin	Warsaw	734
Doddridge, Orah A.....	Mentone	322
Hontz, W. C.....	North Webster	400
Kleder, Donald D.....	Milford	48
Ruggles, A. G., Jr.....	Warsaw	815
Stout, C. Edwin	Silver Lake	164
Zimmerman, Floyd Velpo	Silver Lake	97

LAKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bell, A. Howard	Gary	712
Bick, Peter H.....	Hammond	120
Jennings, Robert G.....	Hammond	661
Jones, Guy W.....	Hammond	699
Sauger, Mrs. Mary F.....	Lowell	379
Samuelson, Carl John	Hobart	324

LAPORTE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Buck, J. Cartwright	Laporte	106
Noble, Donald O.....	Michigan City	775
Wiesjohn, William Herman	Wanatah	757
Zahrn, William F.....	Michigan City	210

LAWRENCE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bailey, Robert M.....	Bedford	723
Franklin, E. Carey	Bedford	42
Matthew, O. R.....	Mitchell	583
Ramsey, J. Harly	St. Francisville	829
Sale, Louis A.....	Mitchell	819

MADISON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Britton, L. M.....	Alexandria	623
Dugan, John W.....	Elwood	722
Fesler, Evert E.....	Elwood	339
Hughel, Samuel L.....	Anderson	197
Kimberlin, Homer A.....	Anderson	55
Morgan, Earl R.....	Anderson	643
Van Loon, R. S.....	Anderson	287

MARION COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Abbott, Earl C.....	Indianapolis	828
Adams, Annie May.....	Indianapolis	136
Albertson, William Charles	Indianapolis	561
Allen, Harry Starr	Indianapolis	575
Allen, Joel E.....	Indianapolis	390
Auld, Edward J.....	Indianapolis	731
Baird, Minnie Ola	Indianapolis	205
Bartholomew, Wm. C.....	Indianapolis	524
Belton, Harry R.....	Acton	771
Billman, R. O.....	Indianapolis	624
Binkley, Chas. Earl	Indianapolis	360
Blass, Frank C.....	Indianapolis	600
Boyatt, Mahlon V.....	Indianapolis	582
Bullington, Harvey H.....	Indianapolis	141
Burgin, Elmer R.....	Indianapolis	208
Carnefu, Robert T.....	Indianapolis	726
Clifford, Lora H.....	Indianapolis	41
Diederich, Edw. C.....	Indianapolis	101
Downs, Tevis C.....	Indianapolis	746
Dugan, Michael	Indianapolis	377
Fatout, Louis	Indianapolis	242
Folliott, L. Ruston	Indianapolis	677
Fritz, Herman J.....	Indianapolis	72
Goldsmith, Louis	Indianapolis	777
Hastings, Frank Dale	Indianapolis	812
Him, Edward D.....	Indianapolis	765
Hitzelberger, Gustave	Indianapolis	733
Huff, Esque A.....	Indianapolis	83

MARION COUNTY—Continued.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Keemer, E. B.....	Indianapolis	827
Kneer, Charles J.....	Oaklandon	268
Knamlem, Harry W.....	Indianapolis	692
Little, G. Robert, Jr.....	Indianapolis	820
Lambert, Charles Irvin	Indianapolis	704
McConnell, Paul H.....	Indianapolis	795
Meloy, Paul	Indianapolis	348
McCord, Margarette B.....	Indianapolis	822
Mendenhall, W. A.....	Indianapolis	344
Miller, Jesse E.....	Indianapolis	126
Miller, Clarence E.....	Indianapolis	608
Murr, Ferdinand Louis	Indianapolis	809
McColley, Harry B.....	Indianapolis	338
Nilius, Robert	Indianapolis	167
Oren, Wm. A.....	Indianapolis	782
Parker, Lloyd	Indianapolis	323
Raymond, Ralph T.....	Indianapolis	697
Reeves, John L.....	Indianapolis	787
Reiffel, Martin L.....	Indianapolis	73
Rice, Owen Rolland	Indianapolis	736
Ridlen, Chas. W.....	Indianapolis	17
Riesbeck, J. V.....	Indianapolis	685
Saulter, Carl M.....	Indianapolis	774
Schillinger, Albert	Indianapolis	206
Shirk, Clyde	Indianapolis	808
Smith, May E.....	Indianapolis	304
Smith, Richard Wirt	Indianapolis	618
Stout, Walter Alfred	Indianapolis	619
Wagener, Edward F.....	Indianapolis	716
Weaver, John H.....	Indianapolis	348
Welch, Clarence C.....	Indianapolis	233
Wetzel, Frank J.....	Indianapolis	93
Williams, Abbott	Indianapolis	285
Wilson, M. D.....	Indianapolis	116
White, Francis G.....	Indianapolis	281
Zimmerman, Mrs. A.....	Indianapolis	115

MARSHALL COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Alleman, H. E.....	Argos	611
Drew, Riley J.....	Tippecanoe	511

MARTIN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Seal, Bernard Waldo	Loogootee	597

MIAMI COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Cox, Martha A.....	Amboy	38
Murphy, Roscoe	Peru	538

MONROE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Fulk, Frederic	Bloomington	751
Stoute, Will A.....	Bloomington	367

MONTGOMERY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Davis, Stephen M.....	Waynetown	550
Hanna, Charles Ursel	Ladoga	549
Johnson, Mazie I.....	New Richmond	243
Menaugh, W. Clyde	Wingate	530
Ogle, Thomas James, Jr.....	Wingate	229
Ringer, Luther E.....	New Ross	195
Ronk, Arthur C.....	Ladoga	198

MORGAN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Combs, Carrel M.....	Martinsville	277
Watson, Cortez M.....	Martinsville	373
Willan, Ira C.....	Morgantown	508

NEWTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Snyder, Fred B.....	Brook	12
Williams, George D.....	Goodland	65
Williamson, Claude Roy.....	Morocco	801

NOBLE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Forrey, Vesta	Wawaka	76
Myers, Homer D.....	Rome City	759
Skinner, Roy M.....	Albion	649
Wolfe, David Albert	Ligonier	203

OHIO COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Buchanan, Miss Edith	Rising Sun	380
Buchanan, Miss Hanna	Rising Sun	381
Hemphill, James B.....	Rising Sun	43

OWEN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Reeves, W. H.....	Freedom	90

PARKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Cooper, James W.....	Marshall	142
Harris, Samuel S.....	Rockville	590
Williamson, Elmer E.....	Marshall	766

PIKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
De Tar, B.....	Winslow	343
Smith, J. A.....	Petersburg	293

PORTER COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Keehn, Jesse D.....	Valparaiso	505
Morgan, Jennie	Hebron	84
Monroe, Harley R.....	Valparaiso	307

PUTNAM COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Dyer, M. Luther	Fincastle	175
Hall, Harvey A.....	Roachdale	355
Jones, Everett W.....	Greencastle	752
York, Arthur R.....	Cloverdale	681

RANDOLPH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Lollar, Nora	Saratoga	149
Martin, John G.....	Lynn	831
Porter, Frank B.....	Parker	750

SCOTT COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Dunlevy, James Clegg	Scottsburg	763
Van De Vort, James D.....	Scottsburg	331

SHELBY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
De Camps, Miss Annie E.....	Shelbyville	14
Hoop, Philip Earl	Shelbyville	654
Jones, Stanley	Shelbyville	594
Reichel, Carl John	Shelbyville	748
Robins, Augustus C.....	Shelbyville	821
Sherman, Robert Edward	Morristown	686
Van Lue, W. Arthur	Shelbyville	713

ST. JOSEPH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Applegate, Samuel W.....	South Bend	665
Casey, James M.....	South Bend	628
Grafford, Lary J.....	New Carlisle	37
Graves, George Thomas	Mishawaka	616
Kuss, Emil G.....	South Bend	747
Nies, Chas. H.....	South Bend	68
Reed, Arthur E.....	South Bend	325
Van Rie, Leo P.....	Mishawaka	672
Scott, Sherman	South Bend	607
Sechler, Merritt C.....	St. Joe	797

STARKE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brickles, Jerry H.....	Knox	817
Wakeman, Leroy B.....	North Judson	682

STEUBEN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Davis, Boyd M.....	Hudson	813
Dufur, Glen D.....	Ray	824
Ferguson, Mamie	Hudson	311
Miller, Waldo Weir	Angola	741
Ritter, Clyde	Angola	675
Rudd, Fred	Hamilton	111

SULLIVAN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Boothe, Chester	Sullivan	589
Bryan, James O.....	Farmersburg	706
Culleun, Harry L.....	Carlisle	503
Stark, O. B.....	Shelburn	143
Tate, Charles E.....	Sullivan	23

SWITZERLAND COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Lamson, Chas. B.....	Vevay	351

TIPPECANOE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Glascock, Arnett F.....	Lafayette	28
Graff, Le Roy H.....	Lafayette	804
Griffin, Thomas A.....	Lafayette	318
Hanna, William P.....	Lafayette	816
Honer, Edward J.....	Lafayette	574
Kennedy, Alta F.....	Stockwell	119
Lyon, Glenn F.....	Lafayette	779
McBride, W. F.....	Dayton	362
Walters, Chester F.....	Battle Ground	805

TIPTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Ballenger, Belle	Sharpsville	249
Speckpaugh, Lewis	Tipton	502

UNION COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Buck, Arthur A.....	West College Corner	211

VANDERBURGH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Bohn, Mattie	Evansville	320
Brannock, Elizabeth A.....	Evansville	278
Forster, Carl F.....	Evansville	729
Hauptmeyer, Fred C.....	Evansville	56
Hermann, Mrs. F. W.....	Evansville	59
Hut, Cletus	Evansville	313
Kempf, Thekla T.....	Evansville	204
Kraft, Edward	Evansville	758
Pfeuder, George, Jr.....	Evansville	591
Pirnat, R. F.....	Evansville	1
Potts, Edd.....	Evansville	760
Schrichte, John Henry	Evansville	627
Thacker, Howard	Evansville	737
Thompson, Paul E.....	Evansville	730
Wolfgang, Lizzie	Evansville	79
Wytenbach, Florence C.....	Evansville	18

VERMILLION COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Hamusley, Clifford Morgan	Clinton	676
Morgan, Harmon K.	Clinton	668
Slater, Roy	Clinton	183

VIGO COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Beck, Walter W.	Logansport	588
Becker, Henry B.	Terre Haute	263
Davis, William M.	Terre Haute	342
Freeman, Girtie E.	Terre Haute	153
Jalbert, Eugene	Terre Haute	535
Reeder, Roy Blake	Terre Haute	671
Roach, Esic Colfax	Terre Haute	276
Schoenfeld, Wm.	Terre Haute	772
Shurte, Andrew J.	Terre Haute	700
Thorn, Fred	Terre Haute	754

WABASH COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Banister, Dr. R. L.	La Fontaine	522
Bradley, John	Wabash	181
Geyer, Anna	La Fontaine	123
Gribben, Charles T.	North Manchester	790
Harter, Jacob	North Manchester	88
King, Robert C.	Wabash	545
Orr, Grover C.	Wabash	796
Williams, Glenn S.	North Manchester	773

WARREN COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Dennis, J. B.	Williamsport	138

WARRICK COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Brizius, Herman	Newburgh	566
Demberger, John A.	Boonville	690

WASHINGTON COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Robertson, Charles A.	Salem	586
Walk, Catherine	Fredericksburg	34

WAYNE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Alford, Harry G.....	Richmond	218
Falls, Curtis G.....	Cambridge City	154
Fouts, John M.....	Centerville	557
Lukens, Lawrence H.....	Richmond	579
Murray, Minnie	Dublin	234
Winsett, Harry G.....	Richmond	99

WELLS COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Burroughs, J. Herbert	Bluffton	225
Lusk, Chas. Routh	Bluffton	196
Stout, Carl A.....	Bluffton	224

WHITE COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Dutton, Harry F.....	Martinsville	298
Hemphill, J. T.....	Monon	251
Meiser, John Wilson	Monticello	564

WHITLEY COUNTY.

<i>Name.</i>	<i>Location.</i>	<i>Number.</i>
Carter, Arthur B.....	Columbia City	701

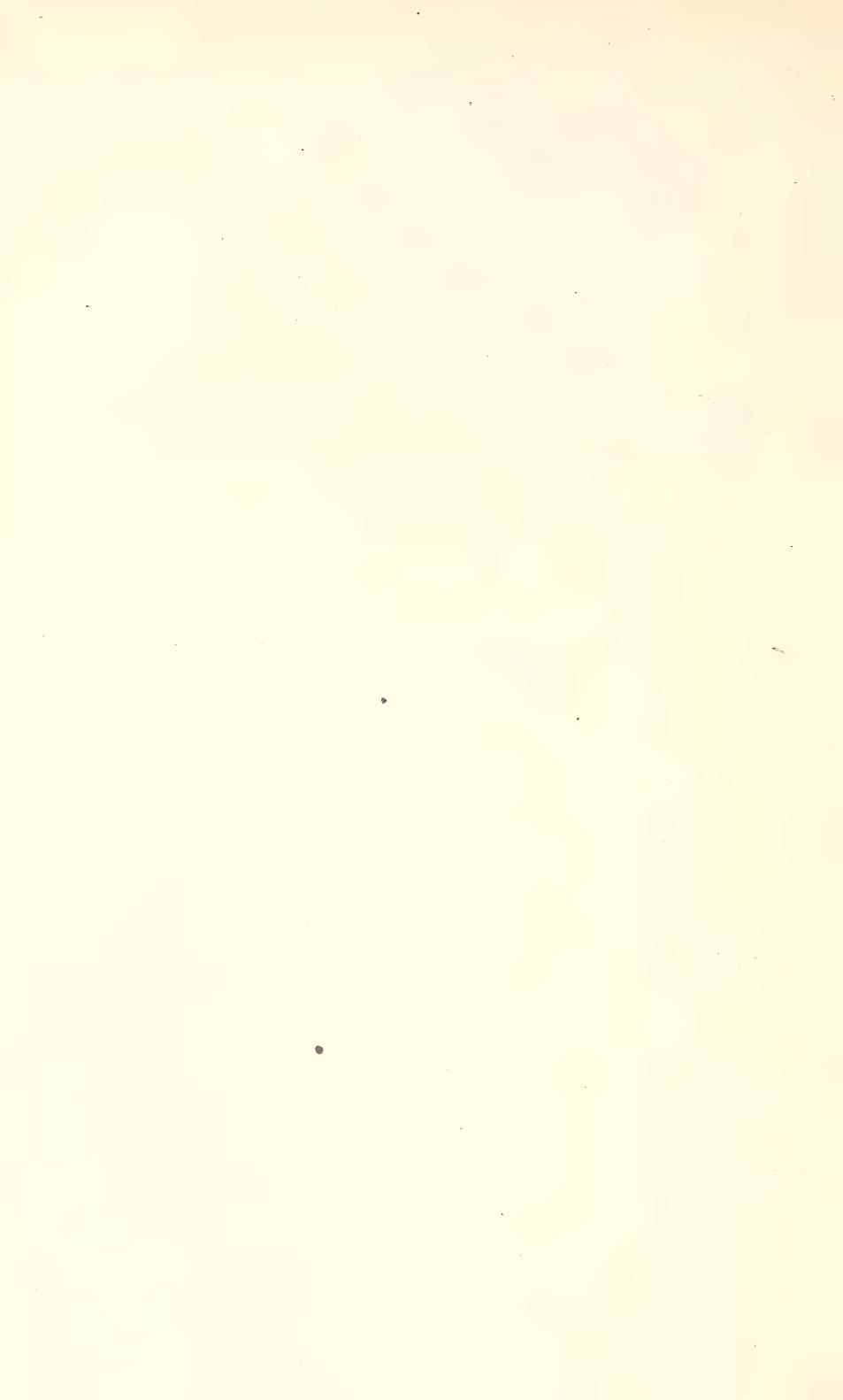
Eighteenth Annual Report

OF THE

**Board of State Charities
of Indiana**

**For the Eleven Months Ending
September 30, 1907**

TO THE GOVERNOR



THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
January 4, 1908. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, January 7, 1908. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

January 7, 1908.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana,
January 8, 1908.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer January 8, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.

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THE BOARD OF STATE CHARITIES.

GOVERNOR J. FRANK HANLY, President, Ex-officio.

	Expiration of Term.
WILLIAM P. COOPER, Fort Wayne.....	March 1, 1907
SARAH STOCKTON, M. D., Indianapolis.....	March 1, 1907
TIMOTHY NICHOLSON, Richmond	March 1, 1908
SYDNEY B. DAVIS, Terre Haute	March 1, 1908
DEMARCHUS C. BROWN, Indianapolis	March 1, 1909
CARRIE GOODWIN REXFORD, Indianapolis	March 1, 1909
AMOS W. BUTLER, Secretary.	

STANDING COMMITTEES OF THE BOARD FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

On Penal and Reformatory Institutions.—Demarchus C. Brown, Sarah Stockton, Timothy Nicholson.

On Hospitals for Insane.—Timothy Nicholson, Sydney B. Davis, William P. Cooper, Carrie Goodwin Rexford.

On Institutions for Defectives, Soldiers' Home and Soldiers' and Sailors' Orphans' Home.—Sydney B. Davis, William P. Cooper, Sarah Stockton.

On County Institutions.—William P. Cooper, Timothy Nicholson, Carrie Goodwin Rexford.

On Statistics and Publications.—Demarchus C. Brown, Sarah Stockton.

On Auditing.—Demarchus C. Brown, Carrie Goodwin Rexford.

On Children.—Sydney B. Davis, Sarah Stockton.

Indianapolis, Ind., December 24, 1907.

HON. J. FRANK HANLY, Governor of Indiana:

Dear Sir—In compliance with law, the Board of State Charities has the honor to submit herewith its eighteenth annual report, being for the eleven months ending September 30, 1907.

Respectfully,

TIMOTHY NICHOLSON,
WILLIAM P. COOPER,
SYDNEY B. DAVIS,
CARRIE GOODWIN REXFORD,
SARAH STOCKTON,
DEMARCHUS C. BROWN,

The Board of State Charities.

AMOS W. BUTLER, Secretary.

GENERAL REPORT OF THE BOARD.

The Indiana Board of State Charities was established over eighteen years ago. One of the original appointees has been a member continuously from that time to the present. The membership at the end of this fiscal year remains the same as it was a year ago.

Looking back over the reports of the earlier years, one finds it hard to realize that so much of that which was then looked forward to as the end to be attained in Indiana's charities has been accomplished. The removal of the institutions from partisan politics and their establishment upon the merit system; the creation of the Reformatory for men, with the indeterminate sentence and parole laws; the separation of the Girls' School from the Woman's Prison; the removal of children from poor asylums and all the subsequent legislation regarding truant, dependent, neglected and delinquent children; the adoption of a poor relief law which provides for the administration of that work in accordance with the best known methods—these are but a few of the many notable and far-reaching things which have been accomplished and for which the Board has stood from the time of its beginning.

We do not believe our people, even in a small way, appreciate the progress that has been made, or know the conditions that have developed in the public charities of our State. It is surprising how little is generally known on these subjects which are of so much importance to the social as well as the material welfare of our people.

While the Board is charged with the supervision of the whole system of public charities of the State and its duty is to see that the institutions are properly conducted, the inmates properly cared for, and the public funds properly expended, yet at the same time it can render a valuable and helpful service by interesting our people in their own institutions and awakening them to a realization of conditions and needs. Probably more of this should be done.

With the growth of the State have come greater demands upon her charities. With the growth of the interest of our people in philanthropy have come greater efforts for charities. Our great State institutions have grown and improved much in the past few years. With this have come increased demands upon the Board

of State Charities and greater opportunities for usefulness. This may be understood better, perhaps, by the following showing of persons who come under the supervision of the Board:

Enrolled in State institutions.....	10,587
Present in poor asylums.....	3,165
Present in jails	1,326
Present in orphans' homes.....	1,582
Estimated population of town and city lockups.....	100
Aided by township trustees.....	38,612
Brought into school by truant officers.....	22,006
Total	77,378

The following is the expense incurred by the above agencies:

State institutions—

Maintenance	\$1,540,984 53	
New buildings and permanent improve- ments	232,778 53	\$1,773,763 06

County poor asylums—

Maintenance	426,788 51	
New buildings and permanent improve- ments	122,249 90	549,038 41

Dependent children—

Orphans' homes:

Maintenance	187,387 01	
New buildings and permanent improve- ments	28,207 43	

215,594 44

Agency of Board of State Charities..... 7,304 77

222,899 21

Boarding jail prisoners (State Statistician's report, 1906)...	203,706 65
Salaries of truant officers.....	32,822 50
Outdoor poor relief	233,612 70

Total\$3,015,842 53

The last legislature passed more laws relating to public charities than any two previous general assemblies—thirty-five in all. We find that many people do not understand these laws. They are unfamiliar with the conditions the laws are designed to meet and with the experience of those engaged in active philanthropy; hence they do not know how to apply them. For that reason conferences of officials and interested citizens have been held in several counties and other counties contemplate doing this. While these laws are not the goal towards which we have been striving, they are in the main

forward steps, and if our officials and our citizens come to understand what they are, what they mean and how they are regarded by students of these subjects, we need have no fear of a reactionary movement. The more important of the 1907 enactments had at some time been recommended by the Board of State Charities. Others received its endorsement and active support during the session.

Practically every phase of the Board's work is affected by the new laws. In the field of State charities probably the most notable act is that which places all the State institutions under uniform management, on a strictly non-partisan basis. Each institution now has a board of trustees of four members, appointed by the Governor, not more than two of whom are of the same political belief or affiliation. Each board appoints its superintendent, and the superintendent in turn is given absolute control of the selection, appointment and discharge of employes. The law specifies that no other qualification save fitness shall be taken into consideration in the making of any of these appointments. Campaign assessments are made illegal.

Another important enactment establishes a State workhouse for women as a branch of the Indiana Woman's Prison, thus providing an institution managed and operated by women alone for the confinement of women offenders who heretofore have been sent to the county jails. The one distinctly new institution contemplated is a hospital for the treatment of tuberculosis, an appropriation of \$30,000 being made for the purchase of a site. Substantial sums were given most of the existing institutions for new buildings or for permanent improvements, and provision was made for carrying forward the construction of the new School for the Deaf, the South-eastern Hospital for the Insane, the Village for Epileptics and the Indiana Girls' School.

The new laws relating to crime and criminals have attracted much attention, not only here but throughout the country. A few of these are not regarded with favor by some authorities. We have them and by careful administration can demonstrate whether they are wise. Among these acts is one authorizing an operation to prevent procreation of confirmed criminals, idiots, imbeciles and rapists. No other state has such a law. Other new laws provide life imprisonment for habitual offenders and increase the maximum sentence for petit larceny from three to eight years. Two other enactments of this legislature have long been advocated by workers in this field: one authorizing circuit and criminal courts to sus-

pend sentence and release upon probation a person convicted of crime or misdemeanor; another making child desertion a felony.

In the field of county and township charities, probably the most important new law is that defining a dependent child and a neglected child, providing for their maintenance and fixing the punishment of any person responsible for or in any way contributing to their condition. Under this law the public treasury is to be called upon to support only such children as have been declared public wards by the court, after due investigation. Some needed amendments secured to the board of children's guardians and the juvenile court laws will facilitate the work in those respective departments.

Our recent legislatures and the Governor are to be commended for their efforts to make proper provision for the unfortunates of our State. With the same careful study by the next legislature and an equally wise policy regarding the State's wards, further substantial progress will be made. This will be to the credit of the State and the benefit of the unfortunate. With all that we can reasonably be expected to do in the next few years, we shall not be able to do more than is needed.

Indiana has four hospitals for the insane and each has a tributary district from which it receives patients. A fifth hospital has been provided for and is under construction at Madison. This will not enable the State to care for all who should receive care and treatment.

A Village for Epileptics is under construction on an extensive tract of good land near Newcastle. Two buildings have been completed and patients are being received. This institution should be of slow growth.

The School for Feeble-Minded at Fort Wayne not only receives feeble-minded, paralytic and epileptic children for care or education, but also has a custodial department for feeble-minded women over sixteen years of age. With the new building for boys the capacity of the institution will be 1,207. When another building for women has been added, it probably should never be any larger. There is urgent need for an additional building for women. There are at present 162 feeble-minded women in the county poor asylums under the age of forty-five, many of whom need the protection of the State institution.

The soldiers and sailors of the wars of the United States and their wives and widows are provided for by the State in the State Soldiers' Home at Lafayette, on a beautiful site overlooking the

Wabash River. The additional quarters being provided will enable it to receive more of those who have applied for admission. The United States has a National Home for Disabled Volunteer Soldiers, at Marion, Indiana, to which many of our citizens go. The Soldiers' and Sailors' Orphans' Home at Knightstown is one of the State institutions whose numbers are lessening. Other states, like Illinois, under similar circumstances, have wisely adopted the plan of receiving into their home of this kind other dependent children of the commonwealth.

The management of the State School for the Deaf at Indianapolis has not encouraged increased attendance. In fact the enrollment of the school has been lower the past four years, though the average daily attendance has remained practically the same. It is the expectation when the school occupies the new institution that its population will be materially increased. The School for the Blind at Indianapolis shows from year to year about the same population.

Under authority granted by the legislature of 1907, the Governor appointed the following as members of the Tuberculosis Hospital Commission: J. N. Babcock, Topeka; Dr. Henry N. Moore, Indianapolis; Benjamin F. Bennett, Greensburg; Isaac R. Strouse, Rockville, and W. S. Holman, Aurora. It is the duty of the commission to purchase five hundred acres of land and to erect thereon a hospital for the treatment of tuberculosis. An appropriation of \$30,000 was made for the purchase of the site. The commission has been busily engaged the past summer in studying the requirements of such an institution and has visited different parts of the State inspecting proposed sites. None has as yet been selected.

The State Prison stands at one end of the list of correctional institutions and the two State schools respectively for boys and girls at the other. The population of both the State Prison at Michigan City and the Reformatory at Jeffersonville is increasing and that of the Boys' School at Plainfield and of the Girls' School at Clermont is decreasing. That of the Woman's Prison at Indianapolis remains practically stationary. The reason of the increase first noted is not because more prisoners are sentenced, but because fewer are released on parole. At the two schools the practical application of the juvenile court and other children laws, and, in the case of the Girls' School, greater activity in finding homes, have lowered their numbers. While the recent legislatures have made provision for additional quarters and buildings at both the State Prison and the Reformatory, under the present policy of paroling

more buildings still will be needed. With the wise use of the adult probation law and a system of state workhouses for men, their population should be reduced because fewer prisoners would be sentenced to them.

With few exceptions, all the prisoners at the State prisons and the Reformatory have some occupation. At the State Prison at Michigan City practically half the population is employed, under contract at a per diem or under the piece price plan. Most of the remainder are employed on State account, either in the manufacture of binder twine or in the new construction work. At the Woman's Prison at Indianapolis those not employed in caring for the institution are engaged in laundering and sewing.

At the Reformatory at Jeffersonville what is called the trade school plan has been adopted. So far as possible, only such industries are installed as can be used to good purpose in teaching the young man a means of livelihood. While he is thus learning a trade and habits of industry, considerable attention is also given to his physical and mental training. The law provides that the articles manufactured shall be supplied so far as can be, to the various institutions and civil and political divisions of the State, the surplus to be sold upon the market.

Taking all these things together, we feel that we have a very good arrangement for employing the labor of prisoners. It is not what we should like or what it will be, but it is the best we have been able to devise with the advice and co-operation of both labor representatives and manufacturers. At neither the Boys' School nor the Girls' School is the labor of inmates employed for revenue. These are strictly schools for the benefit of the boys and girls.

It is a gratification to state that after so many years the Girls' School is entirely separate from the Woman's Prison. The commission to purchase the ground and construct the buildings for the new school bought 127 acres of land about eight miles northwest of Indianapolis, for \$10,925.00. This land is a beautiful site, located on the Peoria division, west, of the C., C., C. & St. L., or Big Four, Railway, also on the Ben Hur interurban line. The buildings consist of seven well planned cottages, a schoolhouse and a heat and power house. Each cottage has a capacity of thirty girls and each girl has her own room, except in the children's cottage, where one dormitory is provided. The cost of the buildings and other expenses paid by the commission amounted to \$238,290.24, making the total expense of the commission \$249,215.24. On March 8, 1907, under a new law, this commission ceased to exist, and the institu-

tion was turned over to the new board of trustees, consisting of four women. The Governor had wisely selected these women in advance, so they might inform themselves of the work they were to take up and the needs to be met. Upon our suggestion they visited similar institutions in some other states and in this way gained an insight into the new problem to be taken up in Indiana in the conduct of such a girls' school in cottages. The information obtained was of help to them in taking up their work in the right way and in properly equipping and planning for organizing and starting the school. The legislature gave the new board \$30,000 with which to pay off bills to the amount of \$6,000 owing by the commission and furnish and equip the buildings. The \$6,000 was paid as contemplated by the law. This, we are informed, leaves about \$2,000 in old bills unpaid.

The school was opened July 10, and between that date and July 17, 233 pupils were transferred from the old institution. With all the inconveniences and perplexing problems of a new institution, a beginning has been made. The new superintendent, Miss Sarah L. Montgomery, and her assistants and the board of trustees, have labored hard under great disadvantages, but are making creditable headway in organizing and developing the school.

With the removal of the girls from the west wing of the Indiana Woman's Prison, the board of trustees of that institution began planning to remodel the vacated quarters to prepare for the admission of women to the "correctional department," in accordance with the provisions of the law previously referred to. The plans were submitted to the Board of State Charities and favorable contracts for the work have been made. Miss Emily E. Rhoades has accepted the appointment to the important position of superintendent of the prison.

The Board has had the usual meetings during the past year. There have also been committee meetings and conferences among members. It has by its committees visited the various State and some of the county and other local institutions. Its members have represented the Board at gatherings for advancing the interests which it represents, both within and without the State. Some of the members have prepared and delivered addresses at such meetings. The visits of the Secretary have been more frequent and reports thereof have been made to the Board.

There have been no such extended investigations of institutions as have occupied the attention of the Board in some previous years. Those which were made required less time and were less formal.

Indiana Boys' School.—Public complaint was made by Mrs. Christopher Vollmer, of Columbus, of the harsh treatment and severe punishment of her son at this institution. After preliminary inquiry, Superintendent E. E. York laid the matter before the Board of State Charities. Demarchus C. Brown, acting as a committee, made a prompt and careful investigation of the case and reported the same to the Board at its meeting August 13, 1907. The report was adopted and the following notice was given to the press: "The charge of cruelty to Edward Vollmer, at the Indiana Boys' School at Plainfield, was brought to the attention of the Board by report of the committee which had thoroughly investigated it. This showed that the boy had been punished in the regular way for serious violation of the rules, for which a written report was made and consent of the Superintendent had. An examination of the boy's head failed to reveal any marks showing that he had been struck over the head, neither was there any testimony to prove that fact. A minute examination of his body failed to reveal any black and blue marks. There were some red marks as a result of the paddling administered. The officer failed to have a fellow officer as witness, as the rules provide, but the punishment was administered in the presence of some of the other boys. There is no proof of any other irregularity in connection with this matter. The management of this institution is very careful in regard to the matter of punishments and an accurate record is kept."

Indiana Girls' School.—Report was made to this Board of the attempted escape of a girl from this school and of the fact that one or more men employed by contractors about the premises were guilty of encouraging or aiding in such escape. A careful investigation was made by the Secretary and the testimony showed that one man was guilty of the offense charged, and possibly of a more serious charge. The matter was referred to the Indianapolis police department, which after investigation arrested the man and took him before the Marion County Juvenile Court, charged with contributing to the delinquency of a child. He was found guilty and given a fine of \$500 and sentenced to the workhouse for 183 days.

While assisting an inmate of a prison to escape is a felony, the penalty for which is a prison sentence, assisting an inmate of such a school to escape is a misdemeanor. The offender may be tried under the contributory delinquency law in the juvenile court if the child is not too old. This case will be a notable one, as it was appealed to the Superior Court, where the finding of the lower court was sustained, and is now pending on appeal in the Supreme Court.

If the final decision should be adverse to that of the lower court, the legislature should be asked to pass a law covering such cases.*

Inquiries have been made in other cases either upon request of the Governor or upon the Board's own motion, as the organic law creating the Board provides. These have been informal and reports have been made to the Board.

At the request of the Governor, Mrs. Rexford, a member of this Board, and the Secretary visited and inspected the Shelby County Jail September 4. We found the jail dark, dirty, foul smelling, unsanitary. Apparently no attempt was made to keep it clean or in repair. There were sixteen prisoners present, all men, thirteen on the first floor and three on the second. The thirteen prisoners on the first floor were all congregated in the corridor. Several of them were on a pile of dirty blankets on the floor. Here were gathered old and young, black and white, and in their midst two boys, who said they were fifteen years of age, were engaged in playing cards, while the others looked on. The locking device to practically all the cells was out of repair, so that the cell doors could not be locked. Outsiders freely communicated with the prisoners. A report of our visit and our recommendations was filed with the Governor.

On the following day the Secretary made a special visit of inspection to the Floyd County Jail, at New Albany, being accompanied by the Secretary of the State Board of Health, the county physician and the superintendent of the city schools. This jail is an old-fashioned structure, built in 1858. There is practically no separation of the men and women. Heavy latticed doors exclude most of the light, and there is poor circulation of air. The plumbing is out of repair, and a foul odor pervaded the place. There is no attempt at classifying the prisoners and there is no occupation. Old and young of different races are all shut up together. There were fifteen men, three women and one boy present at the time of the visit. One of the men was afflicted with tuberculosis. For many years this jail has been condemned as unfit for the care of prisoners. It is a disgrace to the county in which it is located and to the State of Indiana. For years it has been a school of crime. There vice is taught, disease is spread, and immorality commonly practiced. If the good people of Floyd County could know what goes on there; what is encouraged by the conditions; what is practiced under the care of the county and for which the county stands

*The judgment of the Superior Court was affirmed by the Indiana Supreme Court, Jan 16, 1908.

responsible and pays the bills, we do not believe they would rest until this reproach was removed.

Again we have to chronicle certain steps of progress in our county institutions. New buildings, old ones remodeled or repaired, additional facilities and improved administration in one direction or another are the evidences of this advance. The poor asylum conditions in many counties of this State are bad. In some the repairs are neglected; in others the persons in charge, by lack of experience or of the peculiar ability required for caring for persons many of whom are aged or infirm, are unable properly to administer the institution; in others, the lack of conveniences and of proper means of sex separation lead to scandals that must frequently be hushed by the local authorities. It must be said, however, that under the present poor asylum law with the definite tenure of office, more superintendents are reappointed and their experience gained is an advantage after the first term.

There are boards of county charities in seventy-four counties, although five of these are inactive; fifty-four counties have boards of children's guardians and probation officers have been appointed in fifty-four counties. The importance of the work of these boards cannot be over-estimated. It means a real help. Every effort counts for the welfare of some unfortunate. Membership upon such boards is a very useful form of personal service.

The jails, however, are our greatest reproach. Our jail system is a standing disgrace, though it is some comfort to know that Indiana is no worse in this respect than any other State. The committee appointed by the National Prison Association last year at Albany, N. Y., to make an investigation of the jail system of the United States and report thereon, said: "The county system of prisons, judged by over a century of experiment, is bankrupt. All who have studied the subject in the full light of experience advocate removing all convicted persons to district workhouses and colonies under the control of state officials."

Our jails are bad not only because the system is wrong, but because people do not take an interest in them. Officials oftentimes shrink from going to inspect them. Many are dark, foul and unsanitary. Others are infested with vermin or the germs of disease, and the moral conditions in some when both sexes are confined are shocking.

This year we again discover from the reports of the 1,016 township trustees who are the overseers of the poor that fewer persons were aided and the expense of relief given was less than a year ago.

Thirty-eight thousand, six hundred twelve persons received relief at their hands at an expense of \$233,612.70. So far as we have heard, most of the counties are conforming to the law regarding the administration of poor relief. Miami, Knox and Posey are three that have not seen fit to follow the law as interpreted by the Attorney-General.

For the first time in several years there is shown by the reports from the orphans' homes a decrease in their population. With more care in making children public dependents, more families willing to provide for a child and greater activity in home finding, we should expect a decrease in numbers in the orphans' homes from year to year. It is too early to say what the effect of the new dependent and neglected children law will be, but it is thought by some that there will be a falling off of the number of juvenile wards in public institutions. The boards of children's guardians' work in the rescue of unfortunate children from unfit homes is a valuable one. The juvenile court in each county under the new law should be able to regulate the work of the overseer of the poor, the board of children's guardians, the orphans' home and the probation officer so that every form of children's case can be promptly and efficiently handled. By the law of 1907 all children made public wards are available for placement by the agents of the Board of State Charities. This does not relieve the local agencies, however, of their obligation to seek out homes in families for their wards and to visit them afterwards.

This Board is not required by law to supervise private charities unless they receive some support from the public funds, except that the juvenile court law requires the visitation of private children's homes. There are many persons who feel that all private charities should be supervised by the State. From time to time we have brought to our attention organizations or institutions that good people come to know or believe are not what they claim to be; others that are subjects of gossip on account of their work and still others that are more or less openly accused of conducting improper institutions. Should this additional service be desired for the benefit it will be to the unfortunates, as a protection to our people and to the reputable institutions that are not now supervised, we are willing to accept it. The law now requires that all articles of incorporation or for the reincorporation of institutions or organizations for dependent children shall be approved by the Board of State Charities before they can be filed by the Secretary of State. The Attorney-General has given the following opinion relating

thereto: "I am of the opinion that it was the legislative intention that before an association could care for dependent, neglected or delinquent children, it must submit its intended articles of incorporation to the Board of State Charities for the latter's approval, and that a failure so to do is not a mere irregularity of incorporation, but is the omission of a prerequisite.

"The purpose of the statute was to throw safeguards around the organization of societies, orphanages and similar institutions for the benefit of the children which should be entrusted to their charge.

"Corporations organized for such purposes are in a sense performing the duty of the State to dependent, neglected or delinquent children, and it was eminently fit that the State should have a direct voice in determining whether the corporation ought to be organized and whether it should exercise any powers under the law.

"This view is substantiated by section 10, at page 522, of the Acts of 1903, which provides as follows:

This act shall be liberally construed to the end that its purpose may be carried out, to wit: that the care, custody and discipline of the child may approximate, as nearly as may be, that which should be given by its parents, and in all cases where it can properly be done, the child is to be placed in an approved family home and become a member of the family by legal adoption, or otherwise.

"My opinion is, therefore, that where organizations of either of the two classes mentioned in your communication have failed to comply with section 9, *supra*, they have no legal standing, are neither *de jure* nor *de facto* corporations and their right to exist can be questioned, either in a proper action brought on behalf of the State, in the nature of *quo warranto*, or collaterally by any interested individual."

The following associations have filed their articles of incorporation: The Florence Crittenton Home, Terre Haute, and the Rescue Home, Elkhart.

The Indiana Door of Hope, Indianapolis, had overlooked this requirement of the law. When its attention was called to it, it promptly reincorporated. The Rescue Mission, Lafayette, was notified that its articles of incorporation were illegal and that it could not lawfully engage in caring for children under the opinion of the Attorney-General, but it has not sought to comply with the law and we are advised is still engaged in receiving children.

The Board wishes to present as strongly as it can the need for more agents to supervise the children who are the juvenile wards of

the State. While the legislature has wisely made these children State wards, it has failed to make adequate provision for the thorough supervision needed to secure the best results.

The National Conference of Charities and Correction met at Minneapolis in June. The president was Amos W. Butler; the secretary, Alexander Johnson. Considering the delay in the granting of railroad rates, the meeting was well attended. It is unusual to have such a large attendance from New England and other seaboard states at a meeting so far west. The large attendance from central states—Ohio, Michigan, Indiana and Illinois—was gratifying. In fact these states furnish from year to year a large proportion of the attendance at the conference. However, nearly all the states and territories, including Hawaii and the provinces of Canada, were represented. The meeting was an interesting one and the Minnesota friends seemed well pleased at the result. The next conference goes to Richmond, Va. The president is T. M. Mulry, the head of the Superior Council of St. Vincent de Paul, of New York.

The Board of State Charities annually purchases fifty volumes of the proceedings of the National Conference for distribution in Indiana. For several years past it has presented a volume of the proceedings to the college or public libraries in the following cities and towns: Anderson, Bloomington, Bluffton, Crawfordsville, Culver, Fort Wayne, Franklin, Greencastle, Hanover, Huntington, Indianapolis, Jasper, Lafayette, Marion, Merom, Moore's Hill, Muncie, New Harmony, Noblesville, Notre Dame, Peru, Princeton, Richmond, Shelbyville, South Bend and Terre Haute.

The National Prison Association held its meeting this year in Chicago, September 14-19. This was the largest meeting that has yet been held by the association, the registration numbering nearly 600. Several changes were made in the constitution and the name was changed to The American Prison Association. A new auxiliary association was organized, called the Association of Governing Boards, made up of trustees and managers of State institutions. Five persons who attended the original meeting of the association in Cincinnati were present, including Mr. Charles F. Coffin, of Chicago, one of the incorporators. Mr. Coffin has since written his impressions of this year's congress, giving something of the evidences of the great progress that has come in recent years in this work. Nearly all the states of the Union, four departments of the United States government (including one department head), most of the provinces as well as the government of Canada, and Cuba, were represented. As was the case at the preceding meeting at

Albany, N. Y., Indiana had the largest representation of any State outside that of the place of meeting. We were glad to have Governor Hanly present. His address on "The Indeterminate Sentence" was well received, and we have since had it printed to meet the many inquiries made for it. The next meeting of the Association will be held in Richmond, Va., in the fall of 1908.

The annual Indiana State Conference of Charities and Correction at Evansville was not held until after the close of the fiscal year.

Other State organizations which to a certain extent are interested in some phase of the work of charities and correction are as follows: The State Association of County Commissioners, of which John McGregor, Indianapolis, is president; the State Trustees' Association, of which C. C. Miller, of Sidney, is president; the Association of County Auditors, of which Thomas Nugent, of Washington, is president; and the Association of Sheriffs and Chiefs of Police, of which John W. Volpert, of Peru, is president. Each of these organizations holds an annual meeting.

Under the caption, "Recommendations to the Legislature," we have presented in a more formal way such measures as we would suggest for the immediate needs of that part of the State's work which comes under our supervision. Attention is also directed to the more detailed information which is given on subsequent pages as a part of this report, concerning the several State institutions, county poor asylums, county jails, orphans' homes, the insane, the epileptic, outdoor poor relief, etc.

The following table presents in condensed form the more important expenditures for public charities in Indiana for a series of years and some information as to the number of those who shared the State's care. Note that the figures for 1907 cover eleven months only, owing to a change in the end of the fiscal year.

EXPENDITURES.

YEAR.	STATE INSTITUTIONS.		POOR ASYLUMS.		ORPHANS' HOMES.		Official Outdoor Poor Relief.
	Maintenance.	New Buildings and Extra- ordinary Repairs.	Maintenance.	Land and New Buildings.	Maintenance.	Land and New Buildings.	
1890....	\$856,379 58	\$381,439 67	\$243,518 34		\$101,541 99		\$560,232 65
1891....	1,104,068 86	155,716 20	243,972 76		107,231 61		560,012 35
1892....	1,073,768 12	100,623 35					
1893....	1,086,733 41	62,832 91	250,847 50		113,776 39		511,503 35
1894....	1,120,289 79	36,216 49	257,581 44		136,245 28		586,232 27
1895....	1,151,741 35	76,712 90	254,832 48		139,822 35		630,168 79
1896....	1,060,626 92	106,299 27	281,380 33		122,693 21		355,255 29
1897....	1,079,903 24	120,649 94					388,343 67
1898....	1,168,374 81	63,865 51					288,349 62
1899....	1,213,213 56	144,879 52					320,667 53
1900....	1,290,790 33	357,665 49	325,496 50				209,956 22
1901....	1,379,859 81	260,386 05	349,947 67	\$29,749 36	179,114 21	\$5,386 74	236,723 98
1902....	1,382,397 19	270,851 52	388,360 94	31,403 51	165,413 61	602 66	266,876 96
1903....	1,425,752 69	154,449 57	379,679 29	60,016 49	169,943 56	23,277 83	245,745 82
1904....	1,525,740 77	223,940 51	387,813 86	22,001 11	171,319 36	8,127 04	281,899 87
1905....	1,555,787 17	117,970 18	407,141 23	76,969 30	191,488 02	1,000 00	249,884 68
1906....	1,620,454 48	294,838 47	426,788 51	122,249 90	187,387 01	28,207 43	233,612 70
1907....	1,540,984 53	232,778 53					

POPULATION.

YEAR.	Enroll- ment of State In- stitutions.	Number Present in Poor Asylums.	Number Present in Orphans' Homes.	Number Present in Jails.	Number Aided by Trustees.
1890....	5,406	3,264			
1891....	6,294	3,253	1,015	600	
1892....	6,268				
1893....	6,413	3,459			
1894....	6,905	3,731	1,289		
1895....	7,096		1,300		
1896....	7,264	2,976	1,395		71,414
1897....	7,953	3,072	1,401		82,235
1898....	8,224	3,102	1,596		75,119
1899....	8,471	3,133	1,605	771	64,468
1900....	8,839	3,096	1,626	709	46,369
1901....	9,056	3,091	1,690	686	52,801
1902....	9,229	3,046	1,565	801	48,849
1903....	9,650	2,962	1,527	849	40,012
1904....	9,909	3,144	1,591	949	46,009
1905....	10,315	3,115	1,699	889	45,331
1906....	10,417	3,124	1,747	1,062	38,612
1907....	10,587	3,165	1,582	1,326	

RECOMMENDATIONS TO THE LEGISLATURE.

PROVISION FOR THE INSANE.

Indiana has assumed the responsibility of caring for all her insane citizens, but she has not been true to the obligation assumed. That she has done well, we all know; but she has not come up to her full duty—that is, that she shall make provision for all those unfortunates needing care and treatment. We should be careful not to make our insane hospitals too large. The Central is twice as large as it should be, and most of the others should not be increased, unless it is by colonies. The colony plan for caring for the insane, which contemplates the purchase of a farm a little distance removed from the insane hospital, yet near enough to be under its supervision and care, offers a feasible plan for providing additional room for the insane. This has been tried in other states, and the experience has been very satisfactory. To such a colony could be removed a number of mild, harmless, teachable patients, who would be benefited by the simple life and outdoor employment. We recommend that it be tried at one or more of our existing hospitals where the opportunity seems to be best.

We should not wish to see any additions built to the Central Hospital at Indianapolis, yet we feel that a receiving hospital would be a valuable aid to this institution.

The next legislature should take steps looking to the establishment of another hospital for the insane, in the northern part of the State. In order properly to treat the insane, the State should be ready to receive them without delay. This it cannot do until it has provided, in advance, a bed for each 500 of the population.

LAND FOR SOUTHERN HOSPITAL FOR THE INSANE.

The small amount of land at the Southern Hospital for the Insane renders it impossible for the patients to get the benefit from outdoor life that they might have. The congenial employment of certain classes of patients is considered to be most valuable in their treatment. The care of orchards, small fruits, vines, gardens and live stock, including an ample dairy, would furnish much helpful employment, and at the same time the products would be very use-

ful in supplying the institutions with fresh fruit and vegetables and an ample supply of milk. To do this, it is essential that an additional acreage be purchased for the use of the Southern Hospital. This should be not less than 160 acres. In fact, it is the opinion of some of the best institution superintendents, gathered from their ripe experience, that such an institution should have at least one acre of land for each inmate, counting its maximum population.

ATTENDANTS IN THE HOSPITALS FOR THE INSANE.

The hospitals have all experienced much difficulty in obtaining and in keeping attendants because of the low wages paid. There has been some increase in compensation the past year, but the subject should receive further attention lest the work of the hospitals suffer. The pay should be sufficient to get and keep good help.

INSANE CRIMINALS.

There are confined in both our prisons for men, in the hospitals for insane, and at times in county jails, persons convicted of crime who are insane. An insane person can receive neither proper treatment nor right care in a penal institution. Some of them doubtless could be benefited or cured if they could be properly treated. Unless they can be restored in mind they must be a continuing expense upon the State as long as they live. They are troublesome in prisons and jails, interfering with discipline, disturbing the peace, and not infrequently assaulting other inmates or officers. For their own good, the good of the State, and the best interests of the institutions, as well as a matter of economy, provision should be made for a hospital nearby and associated with one of the existing institutions, for the proper care and treatment of these unfortunates.

STATE PUBLIC SCHOOL FOR DEPENDENT CHILDREN.

While we have in the last ten or fifteen years made important progress in the question of dealing with minor public wards, yet at the same time there are grave objections to the present scattered system of caring for dependent children. The board of children's guardians law provides for wayward and neglected children and the counties which have erected homes under this law can give proper care to this class; but one central institution which will act as a receiving home will deal more effectually with the dependent children problem than the present orphans' homes can possibly do.

In many of our small orphanages the children do not receive the training necessary to fit them for useful lives and they are unacceptable in good family homes; whereas a central institution, managed and maintained by the State, would be equipped to prepare them in the very best possible way for family life. The central system has been given a thorough test in Michigan, Minnesota and Wisconsin, and results have proved it not only better for the children, but less expensive for the State.

THE JUVENILE COURT LAW.

The juvenile court law now in operation applies to boys under sixteen years of age and girls under seventeen years of age. This age limit should be extended to eighteen years for both boys and girls.

THE VILLAGE FOR EPILEPTICS.

We believe that the growth of the Indiana Village for Epileptics should be natural and slow and that the legislature should provide for its development in that way. It should be the policy of this institution to do the greatest good to the greatest number, and for this reason it should receive first those cases that are most hopeful. We believe it would be wise to erect a cottage for boys of school age, with two school rooms, one for the ordinary school training and the other for manual training. Nowhere is the epileptic child so much out of place as in the public schools. In the Village for Epileptics such a child could enter into normal life and be trained to a life of usefulness.

COUNTY JAILS.

The jail system we have is a relic of the olden times. It is not creditable to the State. The result of its operations is injurious. Our jails, as they are conducted, do more harm than good. In a rational prison system the jails should be simply places of detention. Convicted prisoners should be confined elsewhere. Provision should be made by law for the official condemnation of county jails by some board. The condemnation should be provided for when the jail is badly out of repair; when it is unsanitary; when the moral conditions are bad. In any event the authorities should be notified and given a reasonable time to remedy the wrong. In case of failure to do so, the facts should be properly presented by the board, and it should prohibit the use of the jail until the fault was remedied or a new jail built.

DISTRICT WORKHOUSES.

Most of the prisoners who are convicted and sentenced to jail are charged with violating the State laws. It is hard to understand why the State should not have charge of them. In most of our jails the prisoners are not separated, they are not classified, and they lead idle and frequently immoral lives. Why should not the State establish one or more workhouses as the need seems to arise, under State control, conducted on the merit system? These could be located upon diversified land, so as to afford as great a variety of employment as possible. The experience of some of our sister States in this way should encourage us as to the probable success of such a venture. To these workhouses all convicted prisoners could be sent who now go to the county jails, except the sentence be an exceedingly short one. There they would be under good discipline and proper training, and would have regular employment. The prisoners could be more cheaply maintained in such institutions, and, inasmuch as they would be conducted in accordance with the best reformatory methods, better results should be secured.

THE CORRECTIONAL DEPARTMENT OF THE WOMAN'S PRISON.

The law of 1907 creating the correctional department of the Woman's Prison, provides that all women convicted of violation of the law the punishment for which has heretofore consisted of confinement in the county jail or workhouse, shall be sentenced to the State institution. However, when the imprisonment adjudged is ninety days or less, or when the fine and costs assessed would not require a woman to serve more than thirty days, it is left to the discretion of the judge to send her either to the State institution or to the county jail or workhouse. This proviso will doubtless leave a great many women in the county jails. In the majority of such institutions there is a lack of proper sex separation; the women prisoners must depend upon the care of men; there are no arrangements for their employment; scandals frequently develop because of their presence there. It seems wise, therefore, to make such change in the law as will remove all convicted women from the county institutions. The correctional department of the Woman's Prison should be enlarged in order to receive them.

THE INDIANA BOYS' SCHOOL.

The proper training of the boys in the Indiana Boys' School demands many things not now possible because of the small appropriation granted the institution for its maintenance. The educational facilities should be improved; a fully equipped gymnasium is needed; the property should be thoroughly repaired; an additional parole agent should be employed. The next legislature should provide for these needs and should make a more liberal allowance for the operating expenses of the school. It has long needed a larger maintenance appropriation than it has received.

JUDGES' VISITS TO CORRECTIONAL INSTITUTIONS.

Under our new system of criminal laws the various reformatory and penal institutions of the State are really a part of the judicial system. Our judges as a rule do not understand them or their work. It would be wise if provision could be made requiring each judge of a circuit or criminal court from time to time to visit each of these institutions, and providing for the payment of his actual traveling expenses. The value of such a step would be very great in the administration of the law and helpful to the institutions.

THE SCHOOL FOR FEEBLE-MINDED YOUTH.

Under the present law, committing women between the ages of sixteen and forty-five years to the custodial department of the School for Feeble-minded Youth, the complainant is liable for the costs of such procedure. The law should be changed so that the prosecuting attorney can bring such action upon information. The institution's custodial department for women should be enlarged. The State has never taken a more important step than the establishment of this department. The building erected in 1901, with a capacity of 130, has long been full, and there is urgent need for an addition in order that other women of this unfortunate class can be given the care and protection of the State.

UNPAID BOARDS OF TRUSTEES.

The Board of State Charities, from its beginning, has favored unpaid boards of trustees for our State institutions. After an experience of seventeen years, during a part of which time most of our boards have served without compensation, we are more than ever impressed with the belief in unpaid boards of trustees. We believe that they render the best service and in all respects are more

satisfactory. Many persons will accept such positions as an honor. The service they render will be as faithful as if paid for. The small compensation allowed is not an attraction to those who would be glad to render service for its own sake. It is attractive, however, to many who will accept such positions for the small salaries paid. We feel it would be better for the institutions and for the State if the boards were composed of members who were paid only their actual expenses.

SUPERVISION OF THE STATE'S WARDS.

There is nothing which pays so well, whether measured by the good it accomplishes or by the value received for money expended, as thorough supervision of those who are wards of the State and have gone out from its several institutions. The dependent children who have been placed out in family homes are supposed to be looked after by representatives of the orphans' homes from which they have gone and by agents appointed by the Board of State Charities. There is supervision by special agents of the men released on parole from the Reformatory and the State Prison. There is also an agent of the Soldiers' and Sailors' Orphans' Home who does some work and should do more. Additional agents are needed at the Indiana Boys' School and the Industrial School for Girls, and all these agencies should be brought to their highest efficiency in order that good homes may be sought and that a complete and thorough supervision of all the State's wards may be had.

As will be shown in this report, the Board of State Charities is not able, with the appropriation made to it, to do the visiting or exercise the supervision over the State's minor wards that the legislature intended. The appropriation is not sufficient to properly do this work. Therefore we recommend an increase by which at least two agents may be added to the force of officers.

SICK AND CRIPPLED CHILDREN.

Those who have to deal with the dependent and neglected children of our State know that there are many cases where these little ones can not be received into a family, or are not permitted to receive an education or learn a trade, because they are crippled or sick. Many of these could be readily cured if the right provision was made for their care and treatment. As it is they have not a fair chance in the world. Their infirmities shut them out of good homes, prevent their obtaining an education and deprive them of a

chance to earn a livelihood. Consequently they are burdens upon their relatives or upon the public throughout their lives. By a very small expenditure per capita, in an institution provided for their needs, a large number of them could be restored to their natural rights as children—the right to a home, to an education, to work for a living.

PROVISION FOR EXPENSES TO STATE CONFERENCE OF
CHARITIES.

The value of the State Conference of Charities is known to all who have given consideration to the subject. Objection is sometimes made by a disbursing officer to the payment of expenses of an official in attending these conferences. Definite provision should be made by statute for the payment of this expense.

THE STATE INSTITUTIONS.

The thirteen State charitable and correctional institutions have had 12,161 persons under their care during the past fiscal year. Of this number 9,786 were present at the beginning of the period and 2,375 additional were received. Eight hundred four of the latter were insane; 315 were admitted to the Soldiers' Home and to the Soldiers' and Sailors' Orphans' Home; 124 to the schools for the deaf, blind and feeble-minded, and 1,132 to the penal and correctional institutions. The daily average attendance was 6,738 in the charitable institutions and 3,024 in the correctional. On the last day of the fiscal year, the institutions had a total enrollment of 10,587 inmates, with 9,847 actually present.

It is difficult to compare these figures with those for preceding years, since owing to the change in the fiscal year the last reports cover only eleven months. However, the institutions for years past have been receiving more inmates than they discharged, the net increase having averaged about three hundred annually. The tendency is less marked this year, the number received having been only 170 greater than the number discharged. In 1906 the difference was even less—101—but in 1905 there was a difference of 406. The number of inmates received, however, depends more upon the capacity of the institutions than upon the number needing the State's care. Most of the institutions, particularly the hospitals for insane, are crowded and have been for some time past. They have received all they could and most of them have a long waiting list. It is the more gratifying, therefore, to find that the correctional institutions, which must admit all who are sentenced by the courts, show little change in the number received. In the past eleven months there have been 1,132 admissions to the prisons and State schools, while for the four years preceding the number of admissions averaged 1,242 each twelve months.

For the care and oversight of these wards of the State, 1,596 persons are employed by the different institutions. The average number of inmates to each person on salary is five in the charitable institutions and eleven in the correctional. The hospitals for the insane employ an average of one attendant for every ten patients. The lowest average of administration (17.8) is found in the State

Prison at Michigan City, where 57 persons are employed to look after more than 1,000 convicts. The other extreme (2.4) is found in the School for the Blind in Indianapolis.

For the eleven months which comprise the new fiscal year, the maintenance of these thirteen institutions cost the public \$1,540,984.53. This sum covers all the regular operating expenses, which are divided under five heads: administration, subsistence, clothing, office, domestic and outdoor departments and ordinary repairs. An additional sum amounting to \$232,778.53, was spent for new buildings and permanent improvements, bringing the grand total up to \$1,773,763.06. Each institution paid into the State treasury a certain amount as receipts and earnings, varying from small amounts for the sale of waste material in some, to the much larger earnings of the prisoners at the State Prison and Reformatory. The State Prison at Michigan City reports \$66,979.62 as earnings and the Indiana Reformatory at Jeffersonville reports \$109,812.28 received from the sale of goods manufactured in the trade schools. The receipts from other sources in all the institutions amounted to \$19,425.44. Deducting these three sums from the total expenditures for maintenance and construction, the net cost to the State is found to be \$1,577,545.72. This sum is still further reduced by the reimbursements of the counties and the United States government. The counties return to the State treasury whatever the State spends for the clothing of the patients in the four insane hospitals and the pupils of the State Schools for the Blind, and the Deaf, as well as practically half the maintenance of the children in the Indiana Boys' School and the Indiana Girls' School. The Federal government reimburses the State to the extent of \$100 per capita annually for the care of soldiers maintained in the State Home at Lafayette.

Thirty-seven per cent., or \$565,112.68, of the regular maintenance expenditures was required for the salaries and wages of officers and employes. Food supplies cost \$419,793.78 or 27 per cent. of the maintenance cost; office, domestic and outdoor departments cost \$410,422.48, or 27 per cent.; clothing, \$65,160.33, or 4 per cent., and ordinary repairs, \$80,495.26, or 5 per cent. The State spent \$678,276.46 in giving hospital care to the insane; \$214,258.40 for the soldiers, their widows and orphans; \$119,783.41 for the feeble-minded; \$105,513.92 for the deaf and blind; \$285,308.03 for the State Prison and Reformatory, and \$137,844.31 for the State schools for girls and boys, and the Woman's Prison.

The average amount each inmate of these different institutions

cost the State for the eleven months comprising the fiscal year was \$157.82, the amount varying as the inmate required asylum care or special training or treatment.

It is always interesting to learn at the end of the fiscal period how nearly the institutions were able to complete the year within the appropriations made by the legislature. With the exception of the Soldiers' Home at Lafayette, the maintenance of which is provided for by a statutory allowance of \$150.00 per capita per annum, each institution has a regular maintenance appropriation, and nine of the thirteen have in addition a per capita allowance to meet the needs should the population increase beyond a certain fixed average attendance. The four institutions which do not have an allowance for excess population are the Soldiers' Home, the Soldiers' and Sailors' Orphans' Home, the School for the Blind and the Girls' School and Woman's Prison. The first three had a small balance remaining at the end of the year, but the funds of the Girls' School and the Woman's Prison fell short by \$9,615.42, \$6,226.55 for the old institution and \$3,388.87 for the school in its new location. This amount was made up by the Governor from his contingent fund.

Even some of the institutions which had an allowance for excess population could not have closed the year without other help. The State Prison was granted a specific appropriation by the last legislature of \$4,300, and the Reformatory one of \$9,000, to guard against a deficit in the maintenance fund. The population of both these institutions was greater this year than ever before in their history. Both the regular and specific appropriations for maintenance were used and in addition the State Prison spent \$10,434.04, and the Reformatory \$15,676.72 from their allowances for excess population. Another institution whose appropriation was entirely too low was the Indiana Boys' School. It used up its regular maintenance fund and was forced to call on the Governor for an additional amount of \$5,000. The school has an allowance for excess population, but as it had very few in attendance above the stipulated number the amount which became available was only \$275.69. The trouble lay in the meagreness of the original maintenance appropriation.

The four insane hospitals used all their maintenance appropriations and a portion of their additional allowance and had the following balances at the close of the year: Central, \$3,578.65; Northern, \$1,625.75; Eastern, \$1,232.80, and Southern, \$613.87. The School for Feeble-Minded Youth used all its regular appropria-

tion, as well as all of the amount which became available for excess population—\$2,450.08. The maintenance expenditures of the School for the Deaf consumed all its appropriation for that purpose and all but \$11.27 of the allowance for excess population.

These facts emphasize the wisdom of the General Assembly in providing, by means of the per capita allowance, for the growing population of the institutions; also in giving the Governor a contingent fund for emergencies. Another point is that the maintenance appropriations of the correctional institutions, notably the Indiana Boys' School and the Indiana Girls' School, are entirely too small for their needs. The State may well afford to be more liberal with these institutions. The two prisons and the Reformatory annually return large sums to the State treasury as earnings, while, as stated above, practically one-half the maintenance of those in the boys' and girls' schools, respectively, is paid by the counties from which they come.

CENTRAL HOSPITAL FOR INSANE—INDIANAPOLIS.

Dr. George F. Edenharter, Superintendent.

Real estate, 160 acres. Capacity, 1,631. At the beginning of the year the hospital had an enrollment of 1,976 patients. During the year 382 were received, and the withdrawals and deaths numbered 323, leaving 2,035 enrolled September 30, 1907. Of these, 1,859 were actually present. The daily average attendance decreased from 1,858.89 in 1906, to 1,838 in 1907. The average number of officers and employes for the year was 321.26.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$275,000 00	\$275,000 00	.....
Maintenance on account of excess population	6,903 73	3,325 08	\$3,578 65
Repairs	22,916 67	21,774 35	1,142 32
Clothing	12,833 33	12,793 58	39 75
Totals	\$317,653 73	\$312,893 01	\$4,760 72

The per capita cost of maintenance, based on the operating expenses and the daily average attendance for the year, was \$170.24.

The value of the produce grown on the institution farm and used during the year is estimated at \$4,516.98, or \$2.46 per capita, and the cost of producing it at \$1,510.43.

As shown above, the population of this hospital is far beyond its

capacity, and the result is a regrettable overcrowding of the wards. Still the demand for admission continues. The hospital annually discharges a goodly percentage of its patients as improved, and it has further the right to return chronic patients to their respective counties. These facts enable it to receive most of the acute cases for whom application is made. It is to this class that preference is always given, though the hospital makes an effort to receive all women who are committed to it. However, because of lack of room the hospital has received fewer patients in the past fiscal year than during any preceding twelve months for twenty-five years back. It is now plain that even when the new insane hospital at Madison is opened, with its proposed capacity of 1,000, the present needs of the central district will scarcely be met.

The usual improvement of the property has continued during the past year. Considerable painting and refinishing have been done. New floors have been laid in a number of the wards in the men's building, adding much to appearances. The general condition of this old building is too well known to need description. Half a century of continuous usage, with too little money available at the proper time for necessary repairs, has brought it to a deplorable condition. It should be said that the superintendent has done the best he could with it. The woman's building has been considerably improved during the past year and is in much better condition than that for men. Cement floors have replaced the old tiles in some of the bath rooms and closets and most of the wards now have iron bedsteads.

On all our visits to this hospital we have found it clean and neat. We have been present at meal time and have found the food ample, of good quality and well served.

Through its pathological laboratory, with its clinics and lectures, the hospital is doing a splendid service to the State. The lectures given by the hospital pathologist and by representatives of the medical colleges are well attended by students, and the knowledge of mental diseases thus gained by them can but result in lasting benefit.

NORTHERN HOSPITAL FOR INSANE—LOGANSPOUT.

Dr. Joseph G. Rogers, Superintendent.

Real estate, 293 acres. Capacity, 1,000. On October 31, 1906, the hospital had 935 patients enrolled; 180 were added and 146 withdrawn during the year, leaving the enrollment 969 at the close of the period. Of these, 868 were actually present. There was an increase in the daily average attendance of inmates from 848.6 in 1906, to 859.05 in 1907. The average number of officers and employes for the year was 181.12.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$123,750 00	\$123,750 00	.....
Maintenance on account of excess population	4,119 20	2,493 45	\$1,625 75
Repairs	6,875 00	6,869 64	5 36
Clothing	5,500 00	5,145 22	354 78
Total	\$140,244 20	\$138,258 31	\$1,985 89
New buildings and extraordinary repairs—			
New cottages	40,000 00	40,000 00	.....
Governor's Contingent Fund (new cottages)	6,164 50	6,164 50	.....
Total	\$46,164 50	\$46,164 50	.....
Grand total	\$186,408 70	\$184,422 81	\$1,985 89

The per capita cost of maintenance, based on the regular operating expenses and the daily average attendance for the year, amounted to \$160.95.

The value of the farm products grown on the institution farm and used during the year is estimated at \$9,995.70, or \$11.64 per capita, and the cost of producing it at \$5,641.39.

The institution has been visited at various times during the year and has invariably been found in good condition. Owing to the state of his health, the superintendent for the past two or three years has not been able to give the hospital the personal inspection it formerly received from him. We are pleased to learn, however, that his health has improved the past year.

The customary repairs and minor improvements have been kept up the past year. The \$80,000 appropriated by the Legislature of 1905 for the erection of two cottages, proved insufficient by \$8,000,

and the work on the buildings has in consequence been greatly delayed. The shortage in funds was due, the superintendent says, to the increase in the cost of labor and material since the appropriation was made. Through his contingency fund the Governor wisely came to the relief of the institution, and it is now thought the cottages will be ready for occupancy early in the fall. They will add 150 to the hospital's present capacity—75 men and 75 women—and will fill the requirements of the district for some time to come. The cottage for men is a very interesting structure and will doubtless be of great value to both the patients and the hospital. It is of the type of a farm colony building, having its own kitchen and dining room. It is to be occupied by the men patients employed about the farm and the grounds. These buildings have separate heating plants.

The food has been examined at various times and always found good and attractively served. The health of the inmates is generally good. During the year Dr. Adele Russell Emerson retired from the service of the hospital, leaving no woman on its medical staff.

EASTERN HOSPITAL FOR INSANE—RICHMOND.

Dr. S. E. Smith, Superintendent.

Real estate, 323.23 acres. Capacity, 742. Beginning the year with an enrollment of 751 patients, the hospital received 117 additional patients and dismissed 116, making the enrollment at the end of the year 752, and of this number all but 16 were actually present. The daily average attendance of patients decreased from 731.14 in 1906 to 730.17 in 1907. The average attendance of officers and employes for the year was 150.3.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$106,333 33	\$106,333 33	.....
Maintenance on account of excess population	4,427 08	3,194 28	\$1,232 80
Repairs	5,500 00	5,497 17	2 83
Clothing	4,583 33	3,197 63	1,385 70
Total	\$120,843 74	\$118,222 41	\$2,621 33
New buildings and extraordinary repairs—			
Railroad crossing	2,500 00	1,279 92	1,220 08
Grand total	\$123,343 74	\$119,502 33	\$3,841 41

The per capita cost of maintenance, based on the operating expenses and the daily average attendance for the year, was \$161.91. The value of the produce grown on the institution farm and consumed during the year is estimated at \$12,398.10, or \$16.98 per capita, and the cost of producing it at \$5,311.56.

A law passed by the legislature of 1907 enables this hospital to effect a crossing over the Pennsylvania Railroad tracks by condemning a right of way, and with the appropriation of \$2,500 which became available April 1st of this year, the work is going forward. The property is in a good state of repair. Every unsatisfactory condition is promptly reported to the superintendent, and if the matter is urgent, special orders are at once issued for its correction. We have inspected every part of the buildings and have found conditions orderly and clean. The percentage of patients who are given outdoor employment or recreation is notably large. Few are secluded or restrained. The food is good and is well served, and the quiet of the dining room is noticeable.

The population of the eastern district increases rapidly and the number of insane needing hospital treatment tests the capacity of the hospital to the utmost. The last legislature appropriated \$60,000 for additions to the two hospital cottages, to become available October 1, but it will be some time before they can be made ready for occupancy. Meanwhile there are many urgent cases seeking admission.

In our hospitals for the insane we find the two extremes of dormitory and single rooms. Originally ten per cent. of the rooms at the Eastern Hospital were single, but the new construction increases this proportion to 25 per cent. The plans of the new Southeastern Hospital provide for 30 per cent. single rooms. With the insane perhaps more than any other public wards, thorough classification is essential. Consequently a considerable number of single rooms is necessary.

SOUTHERN HOSPITAL FOR INSANE—EVANSVILLE.

Dr. Charles E. Laughlin, Superintendent.

Real estate, 160 acres. Capacity, 664. Number of patients enrolled October 31, 1906, 697; September 30, 1907, 701. The number of patients actually present on the last day of the fiscal year was 651. The average attendance for the year was 655.33, or 11.45 greater than for the preceding year. The average number of officers and employes for the year was 119.36.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$95,287 50	\$95,287 50	.....
Maintenance on account of excess population	4,157 45	3,543 58	\$613 87
Repairs	5,500 00	5,498 07	1 93
Clothing	3,666 67	3,656 95	9 72
Painting	916 67	916 63	04
Total	\$109,528 29	\$108,902 73	\$625 56
New buildings and extraordinary repairs—			
New laundry	12,000 00	11,795 87	204 13
Grand total	\$121,528 29	\$120,698 60	\$829 69

The per capita cost of maintenance, based on the operating expenses and the daily average attendance for the year, was \$166.18. The value of the produce grown on the institution farm and used during the year is estimated at \$4,363.42, or \$6.66 per capita, and the cost of producing it at \$769.25.

This year, as last, considerable has been done to put the institution into better physical condition. A new bakery has been erected and an addition to the store room built. The suit brought against the hospital authorities on account of the sewage disposal plant ended in the court deciding it a nuisance. The legislature of 1907 appropriated \$13,500 for a new plant and this is in process of construction. The trustees also have under consideration plans for two congregate dining rooms, for which they have an appropriation of \$40,000, available October 1, 1907.

On February 1st the laundry was destroyed by fire. The legislature was in session at the time. It responded promptly by making an appropriation of \$12,000 for a new building, and the bill was passed under a suspension of the rules. The laundry was built this summer and is now occupied. It is a very good building.

Considerable work has been done the past summer toward the installation of a new heating plant. Three 300 horse-power boilers are being put in. In making these changes the hot water heater was disconnected and since the middle of July the hospital has been without hot water for either bathing or household purposes.

It is to be regretted that the conditions at the Southern Hospital are no better than they are. While from year to year we note improvement in the grounds and the exterior needs of the institution, the organization and administration of the hospital are not

what they should be. Conditions at the time of several visits the past year were very unsatisfactory. We very much wish this hospital could be brought up to a proper standard.

STATE SOLDIERS' HOME—LAFAYETTE.

Col. R. M. Smock, Commandant.

Real estate, 187 acres. Capacity, 875. At the beginning of the year the Home had 1,136 members enrolled. During the year 275 were added to the number enrolled and 229 withdrawn, leaving the enrollment on the last day of the 1907 fiscal year, 1,182. Of these, 786 were present September 30, 1907. The daily average attendance increased from 706 to 749. The attendance of officers and employes for the year averaged 148.25, but of this number 99.25 were members of the Home on salary.

Under the law creating this Home, all honorably discharged soldiers, sailors and marines and their wives and widows, residents of Indiana, are eligible to admission. Under a law enacted in 1905 army nurses may also be received. The State appropriates \$12.50 per month for each member, officer and employe for current expenses, and is reimbursed to the extent of \$100 a year, allowed by the United States Government for every soldier maintained in a State Home.

EXPENDITURES.

Operating expenses—	Available.	Expended.	Balance.
Cash on hand beginning of			
fiscal year	\$8,379 65	\$8,379 65	.....
State per capita allowance...	110,911 96	98,119 41	\$12,792 55
Home fund	8,288 50	8,288 50	.....
Refunds	4 19	4 19	.....
Salary of Commandant.....	1,100 00	1,575 00	350 00
Salary of Adjutant.....	825 00		
	<hr/>	<hr/>	<hr/>
	\$129,509 30	\$116,366 75	\$13,142 55
Less permanent improvements,			
noted below	3,241 70	3,241 70	.....
	<hr/>	<hr/>	<hr/>
Total	\$126,267 60	\$113,125 05	\$13,142 55
New buildings and extraordi-			
nary repairs—			
Permanent repairs (from			
state per capita allowance).	\$3,241 70	\$3,241 70	.....
Widows' Home (balance)...	26,703 24	26,703 24	.....
	<hr/>	<hr/>	<hr/>
Total	\$29,944 94	\$29,944 94	.....
	<hr/>	<hr/>	<hr/>
Grand total	\$156,212 54	\$143,069 99	\$13,142 55

The per capita cost of gross maintenance, based on the operating expenses and the daily average attendance, was \$155.36. The value of the produce raised on the institution grounds and used during the year is estimated at \$1,272.61, or \$1.70 per capita, and the cost of producing it at \$521.10.

The last legislature authorized a number of necessary improvements and additions and much of the work contemplated has been done. Plans for a new \$50,000 hospital have been prepared and submitted to our Board. The site is chosen and the construction work is under way. The building formerly used as a hospital is to be remodeled and refurnished for an infirmary, the Home having been granted \$15,000 for this purpose. A ten-room cottage is being erected by Miami County. With these new facilities, the institution will be able to accept more of its outstanding applications for admission.

While the sanitary condition of the Home has been bettered, the need was for radical improvement, and to meet this need the legislature appropriated \$6,500 for new sewers. The sewer lines are wisely being placed deeper than were the old ones. Considerable work has been done on a new cold storage plant and store room and the power plant is being overhauled. The \$6,000 appropriation for the former was hardly sufficient, and we feel that a mistake has been made in the plans adopted.

The ordinary repairs have been kept up during the year. The principal drive has been improved by the addition of five carloads of crushed stone; a new vehicle barn has been erected; the laundry has been repainted and ventilators have been cut into the ceiling; some repairs, including a new floor for the porch, have been made in the administration building; the grounds have been improved.

There has been an improvement in the administration of the institution. There is, however, much that is unsatisfactory at the Home, in both physical conditions and the administrative system. The Board of Trustees does not place upon the Commandant the responsibility that the proper conduct of the Home demands, or that is contemplated by the law.

The Home has good medical service and the health of the members is as good as could be expected considering their age and infirmities. A new rule of the trustees is to the effect that applicants who have property valued at more than \$600 shall be rejected. This grew out of the fact that the Home was being called upon to maintain some persons who had property of their own.

SOLDIERS' AND SAILORS' ORPHANS' HOME—KNIGHTSTOWN.

A. H. Graham, Superintendent.

Real estate, 247 acres. Capacity, 600. At the beginning of the year the Home had an enrollment of 510 children. During the year 40 were added and 77 withdrawn, leaving the enrollment at the end of the year 473. All of these were present September 30, 1907. The daily average attendance decreased during the year from 452.5 to 444. The average number of officers and employes during the year was 88.25.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$91,666 67	\$91,659 93	\$6 74
Repairs	4,583 33	4,581 90	1 43
Library	275 00	275 00	.....
Agent's fund	916 67	754 08	162 59
Insurance	641 67	620 74	20 93
Total	\$98,083 34	\$97,891 65	\$191 69

The per capita cost of gross maintenance, based on the operating expenses and the daily average attendance, was \$220.48. The value of the produce raised on the institution farm and used during the year, is estimated at \$2,742.50, or \$6.18 per capita, and the cost of producing it at \$1,811.77.

This Home has been visited at various times during the year and always found in good condition. The maintenance appropriation proved ample for the year's needs and the usual ordinary repairs have been kept up. In anticipation of an appropriation made by the last legislature, the institution has purchased two new boilers of a good type. A new and useful feature is the outfit for canning fruit and vegetables. This not only provides the children with better and less expensive food, but also gives them healthful employment.

We are always pleased to speak of the neatness and cleanliness of the Home, of the good school and of the wholesome, healthful condition of the children. We feel that there can be improvement in the business methods and that greater activity should be shown in placing the children out in family homes. The institution is not doing the best work that it is fitted to do. By keeping children so long in the Home, dependence is encouraged. They should be placed out in family homes where they could live independent lives rather than be dependents in an institution. The Board of Trustees has taken some advanced steps. The superintendent has rendered years of faithful service to the State. It is a pleasure to speak of this.

INDIANA STATE SCHOOL FOR THE DEAF—INDIANAPOLIS.

Richard O. Johnson, Superintendent.

Real estate, 89 acres. Capacity, 340. At the beginning of the year the school had an enrollment of 325 children. During the year 32 were added and 83 were withdrawn, making the enrollment at the end of the year 274. All of these were present September 30, 1907. The daily average attendance increased during the year from 314.02 to 315.78. The average number of officers and employes during the year was 89.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$64,166 67	\$64,166 67	.....
Maintenance on account of excess population	31 76	20 49	\$11 27
Repairs	916 67	916 44	23
Industries	4,125 00	3,754 65	370 35
Total	\$69,240 10	\$68,858 25	\$381 85

The per capita cost of gross maintenance, based on the operating expenses and the daily average attendance, was \$218.06. The value of the produce raised on the institution farm and used during the year is estimated at \$1,028.62, or \$3.25 per capita, and the cost of producing it at \$617.17.

The last legislature wisely changed the name of this institution to the Indiana State School for the Deaf.

The school has maintained well its literary and industrial training during the past year. The management is looking forward to the time when the new buildings will be ready for occupancy, and only such repairs as were absolutely necessary have been made. The appropriation for this purpose was only \$1,000.—The administration of the present school and the construction work of the new institution have fully occupied the superintendent's time. He has faithfully given his best ability to the trying and responsible duties devolving upon him.

The legislature of 1907 added \$367,277.00 to the sum previously appropriated for the erection of the new buildings. The site is on a tract of eighty acres of land, four miles north of the center of Indianapolis. Some delay in the work of construction has occurred. The estimated expense of the new buildings is far more than we were at first led to believe. The contracts awarded call for \$926,370.50 and it is estimated that additional requirements and expenses, including the grading, sewers, equipment, etc., will amount to \$128,500, bringing the total cost to \$1,054,870.50.

INDIANA SCHOOL FOR THE BLIND—INDIANAPOLIS.

George S. Wilson, Superintendent.

Real estate, 8 acres. Capacity, 130. At the beginning of the year the school had an enrollment of 128 children. During the year 25 were added and 28 withdrawn, leaving the enrollment at the end of the year 125. All of these were present September 30, 1907. The daily average attendance decreased from 129.01 to 128.37. The average number of officers and employes during the year was 52.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$31,166 67	\$31,163 48	\$3 19
Repairs	2,291 67	2,287 16	4 51
Library	458 33	456 68	1 65
Industries	2,750 00	2,748 35	1 65
Total	\$36,666 67	\$36,655 67	\$11 00

The per capita cost of gross maintenance, based on the operating expenses and the daily average attendance was \$285.55.

Indiana School for the Blind—this is the new name properly given by the last legislature to this institution.

The property of the school has been kept in a good state of repair considering the age of some of the buildings. The grounds look well. An addition to the laundry, for which the legislature appropriated \$1,200, was built during the summer. The number of pupils remains about the same from year to year. The usual work has been carried on in the three departments of the school—literary, industrial and music. No effort is made to make the industrial department a revenue producer, the only object being the training of the children. Altogether the school appears to be doing well and running smoothly. It is thought the new dormitory for girls, affording as it does separate quarters and better accommodations, has been instrumental in increasing the attendance of girls and that a new dormitory for boys, an appropriation for which was asked, but not granted by the last legislature, would have a like result. The superintendent thinks the total number of blind children the school will be called upon to educate will never greatly exceed the present population.

SCHOOL FOR EEEBLE-MINDED YOUTH—FORT WAYNE.

A. E. Carroll, Superintendent.

Real estate, 564.55 acres. Capacity, 1,207. At the beginning of the year the school had an enrollment of 1,035. To this number 67 were added during the year, and there were 69 withdrawals, leaving the enrollment on September 30, 1907, 1,033. On that date there were 1,032 children present in the school. The daily average attendance of inmates during 1907 increased from 1,017.37 to 1,019.28. The average number of officers and employes was 158.54.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$111,833 33	\$111,833 33	.....
Maintenance on account of excess population	2,450 08	2,450 08	.....
Repairs	5,500 00	5,500 00	.....
Total	\$119,783 41	\$119,783 41	.....
New buildings and extraordi- nary repairs—			
Farm land	26,625 00	13,300 00	\$13,325 00
Custodial Cottage for Boys (balance)	24,391 19	24,391 19	.....
Addition to Girls' Cottage...	21,000 00	442 75	20,557 25
Total	\$72,016 19	\$38,133 94	\$33,882 25
Grand total	\$191,799 60	\$157,917 35	\$33,882 25

The cost of gross maintenance for the year was \$117.52 per capita, based on the operating expenses and the daily average attendance. The value of the produce raised on the institution farm and used during the year is estimated at \$7,447.48, or \$7.31 per capita, and the cost of its production \$5,585.61.

The additional land so much needed by the school has been purchased in accordance with the provision made by the last General Assembly. The colony farm now contains 510 acres and is in much better position not only to maintain the stock belonging to the institution, but to afford employment for the able-bodied boys. With the additional facilities for drainage provided for by the same legislature, the farm will soon be in better condition. The past year's crops were not very satisfactory. The use of soft coal in a heater designed for hard coal so smoked the building, and the hard water used so discolored the walls of the lavatories that the colony building had to be repainted the past summer.

The main buildings of the school are in very good condition, repairs having been well kept up the past year. The boys occupy the east wing, the girls the west wing. There are also two separate cottages, one for the custodial grade of each sex, and the smaller boys are quartered in the nursery department of the hospital. The boys' custodial cottage has been erected within the past two years, the finishing touches being added during the past summer. In many ways this is a good building, though there are some objectionable features. It has a capacity of one hundred fifty.

An addition to the girls' custodial cottage has also been built the past year. This is to be utilized as a kitchen and dining room and will result in increasing the capacity of the cottage to one hundred seventy-five.

An appropriation of \$6,000 becomes available October 1st for a new electrical equipment. According to the plans of the trustees, this is to take the place of all other power on both the Home grounds and the colony farm. A new heating system has been installed.

Nothing has interfered with the regular work of the school the past year. Especially good work is being done in sloyd, clay modeling and other work of this kind. The health is good.

The greatest demand of the institution at this time is additional quarters for feeble-minded women. Under the law women can be received up to the age of forty-five years. The building erected for this class, Harper Lodge, is able to care for but one hundred thirty women. It is now full and there are urgent cases awaiting admission. The State can do no wiser thing than to give its protection to more of these unfortunate women and it is hoped the next General Assembly will make further provision for them.

STATE PRISON—MICHIGAN CITY.

James D. Reid, Warden.

Real estate, 101 acres. Capacity, including new cell house, 1,075. There were 1,062 convicts present September 30, 1907, the daily average attendance for the year having been 1,017.7, an increase over 1906 of 112 in the number present and 98.8 in the daily average attendance. Two hundred and seventy-seven prisoners were received during the year, and 165 released by discharge or parole. The average number of officers and employes for the year was 57.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$91,666 66	\$91,666 66	.....
Maintenance (specific appropriation, 1907)	4,300 00	4,300 00	.....
Maintenance on account excess population	10,509 07	10,434 04	\$75 03
Repairs	4,583 33	4,582 95	38
Library	458 33	458 25	08
Discharged prisoners	3,208 33	2,875 26	333 07
Supervision (paroled prisoners)	5,958 33	5,739 65	218 68
Criminal insane	2,640 00	2,615 03	24 97
Total	\$123,324 05	\$122,671 84	\$652 21
New buildings and extraordinary repairs—			
New chapel	\$17,078 95	\$12,702 98	\$4,375 97
Cell house	40,283 69	34,827 31	5,456 38
Wall extension	29,966 45	4,880 50	25,085 95
Laundry machinery	1,175 00	1,175 00	.....
Displacement pump	3,900 00	732 52	3,167 48
Generator and remodeling lighting system	5,200 00	3,308 67	1,891 33
Total	\$97,604 09	\$57,626 98	\$39,977 11
Grand total	\$220,928 14	\$180,298 82	\$40,629 32

The cost of gross maintenance, based on the operating expenses and the daily average attendance, was \$120.54 per capita. The value of the produce raised on the institution farm and used during the year is estimated at \$3,365.72, or \$3.31 per capita, and the cost of its production at \$420.07.

There has been an unfortunate crowding of prisoners at this institution for some years past, but with the completion of the new cell house, for which the legislature of 1905 appropriated \$92,000, the capacity of the prison will be increased to 1,075. This is fifty-seven greater than the daily average number of prisoners present in 1907 and will probably meet the demands for a while, although the population is steadily increasing. This new cell house will soon be ready for occupancy. It is generally conceded to be one of the best, if not the best, of its size in the United States.

With the additional amount placed at its disposal by the last legislature for a chapel, the prison has erected a very satisfactory

structure. It has a seating capacity of 1,200, and if necessary at any time a gallery can be added.

Work has begun on the extension of the wall, for which the legislature appropriated \$29,966.45. When this is completed the larger area will do away with very unsatisfactory conditions which have resulted from the overcrowding of the grounds. Other important permanent improvements are being made at the prison, and the ordinary repairs are also being well kept up. The new dining room and kitchen erected last year are proving very satisfactory. The food has been examined frequently during the year and found good and wholesome.

The medical service of the prison is in good hands. It is fortunate that the physician in charge has had experience with the insane, since there are a number of that class of prisoners. While these are given every care possible in a prison, the surroundings are not conducive to their return to mental health and the State should make provision for their treatment elsewhere.

The usual industries have been carried on the past year. Principal among these is the binder twine plant, which is operated on State account. This has now been in successful operation since March 15, 1906. It provides employment for a number of prisoners and benefits the farmers by furnishing them a good material at somewhat cheaper rates than they can obtain it elsewhere. There is no industry of this kind in the State with which to compete. However, there is strong opposition to it on the part of the binder twine trust and its agents.

The administration of the parole law is watched with care and the paroled men receive good supervision.

INDIANA REFORMATORY—JEFFERSONVILLE.

W. H. Whittaker, Superintendent.

Real estate, 20 acres. Capacity, 1,000. There were 1,175 inmates present September 30, 1907, the daily average attendance for the year having been 1,144.85, an increase over 1906 of 82 in the number present and 50.01 in the daily average attendance. Three hundred and thirty-five inmates were received during the year and 253 released by discharge or parole. The average number of officers and employes for the year was 82.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$99,000 00	\$99,000 00	.....
Maintenance by specific appropriation	9,000 00	9,000 00	.....
Maintenance on account of excess population	15,703 54	15,676 72	\$26 82
Repairs	4,583 33	4,581 96	1 37
Library	497 07	497 07	.....
Paroled and discharged prisoners	11,000 00	10,898 96	101 04
Supervision (paroled prisoners)	3,750 00	3,747 28	2 72
Trade schools	13,750 00	13,735 88	14 12
Schools	5,500 00	5,498 32	1 68
Total	\$162,783 94	\$162,636 19	\$147 75
New buildings and extraordinary repairs—			
New roofs	\$4,000 00	\$3,774 11	\$225 89
Water pipes	1,000 00	787 45	212 55
Blacksmith shop	2,000 00	1,992 21	7 79
Officers' quarters	500 00	500 00	.....
Furniture for hospital	1,500 00	622 10	877 90
Foundry	15,000 00	10,040 04	4,959 96
Paving	3,000 00	2,662 46	337 54
Total	\$27,000 00	\$20,378 37	\$6,621 63
Grand total	\$189,783 94	\$183,014 56	\$6,769 38

The cost of gross maintenance, based on the operating expenses and the daily average attendance, was \$142.06 per capita. The value of the produce raised on the institution farm and used during the year is estimated at \$658.93, or 58 cents per capita; and the cost of its production at \$206.70.

With facilities for caring for only one thousand men, the Reformatory has had a daily average attendance of 1,144.85 during the past eleven months, the population at times having reached nearly twelve hundred. Many of the cells have two occupants each. It has been found necessary to turn the first and second stories of the old bath house and clothing room into dormitories. One hundred forty men have been provided with sleeping quarters in this way. Notwithstanding all this crowding, the Reformatory is doing good work in fitting young men for life outside the walls. The institution is kept in excellent sanitary condition; wholesome food is provided; the medical service is in good hands and the moral,

mental and industrial training of the men receives careful, intelligent attention. All the men who leave the institution are provided with good clothing and a certain amount of money, and those who are released on parole remain under the supervision of the parole agents until it is felt they are ready to stand alone.

The past year has seen substantial improvement in the physical condition of the institution and grounds. The foundry is being rebuilt and enlarged. The hospital has been improved; a number of the buildings have been reroofed; a blacksmith shop has been erected; the yard has been cleaned and the walks and drives have been newly paved. A valuable addition to the institution's equipment is a drill ground. This has been established on a three-acre tract of land adjoining the old wall, through which an ample gateway has been cut. With the \$3,000 appropriated for the purpose by the legislature of 1905, it has been enclosed by a new wall. The men are now given regular military drill and the results are highly satisfactory.

With the increased maintenance appropriation granted by the last General Assembly, the institution has been enabled to pay higher salaries and this is a great help toward improving the standard of employes. An additional state agent has been employed for the oversight of paroled men. The schools are doing good work. The superintendent of schools has been making quite a study of illiterates and degenerates and he presented the result of his study at the National Conference of Charities and Correction at Minneapolis this year.

The development of the trade schools continues. So far as we have been able to learn the superintendents of the State institutions are pleased with the goods they receive from the Reformatory. Brooms, mops, clothing and tinware are the principal articles purchased. Of necessity the bulk of the goods manufactured in the trade schools is now sold upon the market, but it is believed that eventually the needs of the institutions and the various political divisions of the State will require practically the total output.

INDIANA GIRLS' SCHOOL AND WOMAN'S PRISON—INDIANAPOLIS.

Miss Emily E. Rhoades, Superintendent.

Real estate, 17 3-4 acres. Capacity: School, 160; Prison, 42. There were 213 girls present September 30, 1907, the daily average attendance for the year having been 249.97, a decrease from 1906 of 47 in the number present and 3.19 in the daily average attendance. One hundred and twenty-seven girls were received during the year, and 174 released by discharge or parole. In the prison there were 48 women present on September 30, 1907, the daily average attendance having been 48.42. This shows a decrease from 1906 of four in the number present and 7.52 in the daily average attendance. Seventeen women were received during the year, and 21 released by discharge or parole. The average number of officers and employes for the two institutions was 37.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$34,833 33	\$34,833 33	.....
Repairs	2,750 00	2,718 87	\$31 13
Discharge money	641 67	641 08	59
Library	275 00	274 92	08
Maintenance from per capita allowance and Governor's contingent fund	18,709 75	18,709 75	.....
Total	\$57,209 75	\$57,177 95	\$31 80
New buildings and extraordinary repairs—			
Light and power plant	\$40,000 00	\$2,480 00	\$37,520 00
Furniture and equipment.....	24,000 00	18,579 71	5,420 29
Hennery and piggery	500 00	184 76	315 24
Stand pipe	2,000 00	1,868 00	132 00
Improvement of grounds	5,000 00	1,837 64	3,162 36
Vehicles, etc.....	3,000 00	2,503 90	496 10
Total	\$74,500 00	\$27,454 01	\$47,045 99
Grand total	\$131,709 75	\$84,631 96	\$47,077 79

The per capita cost of gross maintenance, based on the operating expenses and the total average daily attendance for the year of both prison and school, 298.39, was \$191.62. The value of the produce raised on the institution farm and used during the year is estimated at \$781.84, or \$2.62 per capita.

The long desired separation of the Girls' School from the Woman's Prison is now an accomplished fact. The new institution for

the girls has a beautiful location about eight miles northwest of Indianapolis. There are 127 acres in the farm, upon which have been built seven cottages, a power plant and a school house. Each cottage accommodates thirty girls and with its own dining room, kitchen, laundry and other domestic departments affords an excellent opportunity to make good housekeepers of the girls. Except in one cottage, where the younger children live, each girl has her own room. Water, steam heat and electric lights are supplied from a central plant. The lack of screens to the cottage windows facilitates escapes by the girls. This omission should be supplied. While in many ways the buildings are ideal, there are some serious defects, and many obstacles to the proper conduct of the school are presented by conditions. Time will remedy some of these difficulties.

Other buildings are to be erected. The legislature of 1907 appropriated a total of \$56,750 for new buildings and permanent improvements, including an additional cottage for the girls, two small cottages for men employes, additional heat and power equipment, store house and cold storage, barn and farm buildings, fences, walks, drives, etc. Some of this work has been done during the past summer.

The school is handicapped at present by its limited maintenance appropriation, and its force of employes is too small. The trustees have been fortunate in securing for their superintendent Miss Sarah L. Montgomery, formerly of Indiana, but more recently of Springfield, Ill., where she was principal of the Training School for Teachers. She comes highly recommended for the responsible position she has been chosen to fill. The girls are showing marked improvement in health and spirits since their removal from their former crowded quarters. As shown above, the number present has been reduced to 213. This has been accomplished through the greater activity in placing the girls in family homes. The investigation of these homes and the after-supervision of the girls is more than one agent can do properly and it is hoped the next legislature will make further provision for this important part of the school's work.

It will be noted that the financial statistics given above include the maintenance expenditures of the Indiana Girls' School and the Woman's Prison for the entire fiscal year, though the two institutions have been separated since July 16. This has been done for convenience. On July 16 the school began drawing on the \$200 per capita allowance made by the legislature for its mainte-

nance in the new location until the regular appropriations of the next fiscal year became available.

The Woman's Prison remains under the superintendency of Miss Emily E. Rhoades. It has been visited frequently during the year. The usual industries have been maintained and the women receive good care and proper discipline. Of the forty-six present on the occasion of our last visit, September 25th, not one was in punishment or in the hospital.

In accordance with an act of the legislature of 1907, that part of the building formerly occupied by the Girls' School is being converted into a workhouse for women, who under the present penal system are sentenced to county jails (Acts of 1907, Chapter 125). This is known as the correctional department of the Woman's Prison. The work of remodeling is going forward at a very satisfactory rate. The board of trustees is to be congratulated on the fact that the bids for the new construction came within the appropriation.

INDIANA BOYS' SCHOOL—PLAINFIELD.

E. E. York, Superintendent.

Real estate, 5277 $\frac{7}{8}$ acres. Capacity, 600. There were 545 boys present September 30, 1907, the daily average attendance for the year having been 563.98, a decrease from 1906 of 23 in the number present and 16.75 in the daily average attendance. Three hundred and seventy-six boys were received during the year, and 400 were released by discharge or parole. The average number of officers and employes for the year was 49.29.

EXPENDITURES.

Operating expenses—	Appropriation.	Expended.	Balance.
Maintenance	\$68,750 00	\$68,750 00	.....
Maintenance on account of excess population	275 69	274 21	\$1 48
Repairs	6,642 21	6,642 21	.....
Governor's contingent fund (main- tenance)	5,000 00	4,999 94	06
Total	\$80,667 90	\$80,666 36	\$1 54

The per capita cost of gross maintenance, based on the operating expenses and the daily average attendance for the year, was \$143.03. The value of the produce raised on the institution farm and used during the year is estimated at \$13,222.48, or \$23.45 per capita, and the cost of producing it at \$1,500.

It is a gratification to say the school was able to complete the year without temporarily decreasing the number of its officers. This was accomplished only by an allowance from the Governor's contingent fund of \$5,000 to supplement the regular maintenance appropriation. It is hoped that the school's funds will not again run so short. The appropriation for the ensuing biennial period is the same as for the two years just closed, \$75,000, but the per capita allowance for excess population is \$120 instead of \$115 and the basis is 550 inmates instead of 570. This will relieve the situation to some extent, but the school should have a larger maintenance appropriation. Its population is young and hopeful, and it ought to receive more liberal treatment at the hands of the General Assembly. Another thing that should be taken into account is that one-half its maintenance is repaid to the State by the counties from which the boys are sent. From institution people who have visited the school in the past year, we have heard criticisms of the lack of facilities provided by the State and the notable need of repairs. All that is possible with the amount at its disposal is being done by the school to start the boys toward good citizenship. The health is good. The population was lower last year than for sometime past. One reason assigned for this is the work of the juvenile courts. Investigation of the homes into which boys are to go and after-supervision bring good results; consequently it is a gratification to know that at the beginning of the fiscal year the school is to have an additional parole agent.

The usual minor improvements have been made during the fiscal year and much of the new construction begun last year has been completed. The new bakery is in operation. The new hospital, a creditable building, was occupied early in March. Owing to apparently unavoidable delay, the additional cottage and the manual training shop are not yet completed. The heating and power system is being enlarged; arrangements have been made to provide each cottage on the grounds with twelve shower baths; the chapel has been repaired; some new cement side-walks have been laid and in other ways the institution is being put in better physical condition.

The farm has yielded but little fruit this year, though other crops were good and the garden was fine. The institution has a good dairy.

THE STATE INSTITUTIONS.

SUMMARY OF STATISTICS FOR THE ELEVEN MONTHS ENDING SEPTEMBER 30, 1907.

(Prepared in conformity to resolution adopted by the National Conference of Charities and Correction, Philadelphia, May, 1906.)

MOVEMENT OF POPULATION.

	Males.	Females.	Total.
Number of inmates enrolled Nov. 1, 1906..	6,220	4,197	10,417
Temporarily absent	280	351	631
Number of inmates received during eleven months ending Sept. 30, 1907.....	1,635	740	2,375
Number of inmates discharged during eleven months ending Sept. 30, 1907..	1,483	722	2,205
Number of inmates enrolled Sept. 30, 1907..	6,372	4,215	10,587
Temporarily absent	311	429	740
Daily average attendance of inmates for eleven months ending Sept. 30, 1907..	5,982.83	3,781.07	9,763.90
Average number of officers and employes..	....	....	1,596.67

EXPENDITURES.

Current expenses—	Per Capita.	Total.
Salaries and wages	\$57 88	\$565,112 68
Subsistence	42 99	419,793 78
Clothing	6 67	65,160 33
Office, domestic and outdoor expenses.....	42 04	410,422 48
Ordinary repairs	8 24	80,495 26
Total	\$157 82	\$1,540,984 53
Extraordinary expenses—		
New buildings, land, etc.....		\$183,994 06
Permanent improvements		48,784 47
Total		\$232,778 53
Grand total expenses for maintenance and construction.....		\$1,773,763 06
Receipts and earnings		196,217 34
Net total expenses		\$1,577,545 72

CENTRAL HOSPITAL FOR INSANE, INDIANAPOLIS.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Deps.	Subsistence.	Gross Maintenance.		
For the year ending October 31, 1891.....	1,541	1,394.4	\$6 16	\$8 91	\$62 84	\$46 49	\$77 83	\$202 23	.....	.....
For the year ending October 31, 1892.....	1,504	1,418.2	6 16	10 53	62 82	42 32	74 34	196 17	.....	.....
For the year ending October 31, 1893.....	1,512	1,430.6	6 67	17 29	61 45	39 66	75 40	200 47	.....	.....
For the year ending October 31, 1894.....	1,498	1,442.4	6 35	10 21	63 92	53 62	64 59	198 69	.....	.....
For the year ending October 31, 1895.....	1,543	1,448.04	6 39	10 36	61 75	58 22	61 47	198 19	.....	.....
For the year ending October 31, 1896.....	1,581	1,493.9	4 97	6 69	57 92	49 07	55 39	174 04	.....	.....
For the year ending October 31, 1897.....	1,612	1,495.8	5 26	6 69	57 97	45 82	57 99	173 83	.....	.....
For the year ending October 31, 1898.....	1,680	1,503.9	3 09	6 65	57 61	33 99	59 57	100 91	.....	.....
For the year ending October 31, 1899.....	1,784	1,583	4 99	6 32	53 89	35 62	53 95	154 77	.....	.....
For the year ending October 31, 1900.....	1,816	1,619.46	6 21	17 29	55 26	35 55	60 88	175 19	.....	.....
For the year ending October 31, 1901.....	1,845	1,668.71	4 69	14 98	53 82	34 10	60 87	168 46	\$2 15	\$177 34
For the year ending October 31, 1902.....	1,904	1,720.67	5 74	15 00	53 54	41 87	64 70	180 85	2 03	170 56
For the year ending October 31, 1903.....	1,946	1,774.77	5 64	14 72	55 13	34 18	62 78	172 45	2 75	182 88
For the year ending October 31, 1904.....	1,982	1,787.64	6 33	14 93	56 34	43 98	62 41	183 99	2 90	186 89
For the year ending October 31, 1905.....	2,070	1,832.98	6 15	16 09	55 29	42 93	61 10	181 56	2 96	184 52
For the year ending October 31, 1906.....	1,976	1,858.89	6 39	18 27	56 69	41 94	60 59	183 88	1 92	185 80
For the eleven months ending September 30, 1907.....	2,035	1,838.00	5 95	14 03	57 17	35 82	57 27	170 24	2 46	172 70

NORTHERN HOSPITAL FOR INSANE, LOGANSPORT.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Depts.	Subsistence.	Gross Maintenance.		
For the year ending October 31, 1891.	414	377.3	\$4.44	\$19.41	\$83.87	\$50.35	\$65.61	\$223.68		
For the year ending October 31, 1892.	433	393.9	5.73	14.79	82.54	47.04	65.69	215.79		
For the year ending October 31, 1893.	440	413.49	5.38	10.43	81.25	46.61	61.89	205.56		
For the year ending October 31, 1894.	507	446.97	5.92	12.61	78.06	48.80	55.71	201.10		
For the year ending October 31, 1895.	558	505.25	5.97	21.04	72.81	42.57	45.63	188.02		
For the year ending October 31, 1896.	618	553.75	5.17	14.31	68.93	33.03	41.09	162.53		
For the year ending October 31, 1897.	632	585.03	3.50	11.20	66.87	29.37	42.90	153.84		
For the year ending October 31, 1898.	636	604.45	4.48	10.96	65.94	31.42	43.54	156.34		
For the year ending October 31, 1899.	640	606.52	1.97	8.35	68.37	33.40	43.72	155.81		
For the year ending October 31, 1900.	731	620.83	2.90	8.05	67.78	39.59	45.70	164.02		
For the year ending October 31, 1901.	821	730.39	3.46	8.85	70.99	39.04	52.94	175.28	\$11.18	\$175.20
For the year ending October 31, 1902.	824	774.08	4.00	5.03	63.11	38.43	52.60	163.17	10.77	186.05
For the year ending October 31, 1903.	929	791.38	3.41	5.38	68.17	39.87	49.13	165.96	10.55	173.72
For the year ending October 31, 1904.	946	834.89	5.75	3.59	69.19	42.20	50.92	171.65	13.21	179.17
For the year ending October 31, 1905.	952	852.41	5.61	3.76	68.46	39.25	45.85	162.93	9.76	181.41
For the year ending October 31, 1906.	935	848.6	4.20	3.97	73.16	40.52	46.64	168.49	16.97	179.90
For the eleven months ending September 30, 1907.	969	859.05	4.97	4.46	66.12	39.48	45.92	160.95	11.64	172.59

EASTERN HOSPITAL FOR INSANE, RICHMOND.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Depts.	Subsistence.	Gross Maintenance.		
For the year ending October 31, 1891.....	410	341.9	\$3 07	\$15 70	\$97 98	\$58 46	\$68 16	\$243 37	.....	.....
For the year ending October 31, 1892.....	439	391.1	4 53	22 39	89 34	43 81	57 09	217 16	.....	.....
For the year ending October 31, 1893.....	451	422.38	4 14	6 90	83 10	41 42	65 43	200 99	.....	.....
For the year ending October 31, 1894.....	450	431.44	5 54	26 26	81 48	51 36	55 28	219 92	.....	.....
For the year ending October 31, 1895.....	456	436.4	4 99	35 74	78 85	49 09	48 96	217 63	.....	.....
For the year ending October 31, 1896.....	519	465.6	4 11	22 71	73 00	43 44	50 03	193 29	.....	.....
For the year ending October 31, 1897.....	542	508.9	3 69	19 92	67 15	37 62	46 30	174 68	.....	.....
For the year ending October 31, 1898.....	545	520.9	5 72	9 59	70 44	40 04	53 06	178 85	.....	.....
For the year ending October 31, 1899.....	549	531.6	2 79	9 40	72 05	38 18	56 26	178 68	.....	.....
For the year ending October 31, 1900.....	601	570.3	4 26	8 77	69 93	40 51	56 04	179 21	\$13 66	\$192 87
For the year ending October 31, 1901.....	643	618.7	5 64	12 16	74 16	44 59	53 99	190 54	15 02	205 56
For the year ending October 31, 1902.....	645	625.04	4 79	6 36	69 21	37 09	56 82	174 27	13 96	188 23
For the year ending October 31, 1903.....	694	656.34	4 57	6 08	67 95	35 62	57 62	171 84	16 09	187 93
For the year ending October 31, 1904.....	722	686.32	6 34	7 26	66 89	44 42	51 39	176 30	14 92	191 22
For the year ending October 31, 1905.....	739	714.55	6 44	6 98	64 57	48 09	51 45	177 53	16 56	194 09
For the year ending October 31, 1906.....	751	731.14	5 68	8 16	65 41	45 10	52 17	176 52	17 08	193 60
For the eleven months ending September 30, 1907.....	752	730.17	4 38	7 53	61 03	42 46	46 51	161 91	16 98	178 89

SOUTHERN HOSPITAL FOR INSANE, EVANSVILLE.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.					Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Depts.	Subsistence.		
For the year ending October 31, 1891.	381	235.5	\$9.72	\$66.85	\$111.52	\$103.81	\$69.03	\$360.93	.....
For the year ending October 31, 1892.	392	339.45	7.02	40.66	78.82	36.37	54.44	217.31	.....
For the year ending October 31, 1893.	402	380.83	6.24	38.53	74.51	39.68	59.36	218.82	.....
For the year ending October 31, 1894.	424	387.49	5.42	27.16	73.90	41.63	57.84	205.95	.....
For the year ending October 31, 1895.	436	401	7.96	30.35	71.05	46.69	55.88	211.93	.....
For the year ending October 31, 1896.	435	400	5.98	25.47	70.37	37.50	51.93	191.25	.....
For the year ending October 31, 1897.	432	402	6.54	14.19	74.43	34.89	60.24	190.29	.....
For the year ending October 31, 1898.	534	459	6.96	8.71	73.62	41.58	56.49	187.36	.....
For the year ending October 31, 1899.	547	494	6.27	8.10	68.99	40.20	59.98	183.44	.....
For the year ending October 31, 1900.	643	546	4.64	9.16	64.23	46.09	60.18	184.30	\$191.78
For the year ending October 31, 1901.	652	592	3.49	8.45	62.96	41.45	53.67	170.02	177.36
For the year ending October 31, 1902.	666	619.52	4.07	6.46	63.59	33.91	58.94	166.97	175.34
For the year ending October 31, 1903.	671	617.29	4.11	7.19	62.08	32.27	63.74	169.39	177.84
For the year ending October 31, 1904.	682	626.98	6.07	6.62	60.19	43.21	55.32	171.41	186.42
For the year ending October 31, 1905.	684	611.33	6.43	6.25	60.33	47.96	56.65	177.62	186.20
For the year ending October 31, 1906.	697	643.88	6.04	10.49	62.33	40.31	61.18	180.35	186.87
For the eleven months ending September 30, 1907.	701	655.33	5.58	9.79	54.63	35.61	57.57	166.18	172.84

SOLDIERS' HOME, LAFAYETTE.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Adminis- tration.	Office, Domestic and Outdoor Dep'ts.	Sub- sistence.	Gross Main- tenance.		
For the year ending October 31, 1898.	513	437.75	\$12.08	\$17.79	\$32.62	\$50.54	\$48.87	\$161.90	.....	.....
For the year ending October 31, 1899.	636	480.5	11.31	11.10	37.47	58.35	50.59	168.82	.....	.....
For the year ending October 31, 1900.	643	525.25	2.59	13.31	42.33	47.54	59.91	165.08	\$2.18	\$167.86
For the year ending October 31, 1901.	694	497	1.79	10.47	47.89	44.62	60.74	165.51	1.21	166.72
For the year ending October 31, 1902.	759	549.5	1.37	9.16	43.10	54.86	58.81	167.30	45	167.75
For the year ending October 31, 1903.	811	592	1.18	14.67	40.13	40.01	57.70	153.69	1.55	155.24
For the year ending October 31, 1904.	847	640	1.38	8.94	43.43	48.43	63.08	165.26	59	165.85
For the year ending October 31, 1905.	993	689.25	1.95	7.36	42.67	44.15	57.36	152.49	63	153.12
For the year ending October 31, 1906.	1,136	706	1.20	15.44	45.90	53.69	60.90	177.13	1.64	178.77
For the eleven months ending September 30, 1907.	1,182	749	1.12	9.42	43.98	43.90	56.94	155.86	1.70	157.06

SOLDIERS' AND SAILORS' ORPHANS' HOME, KNIGHTSTOWN.

POPULATION.	PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.	
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Dep'ts.			Subsistence.
For the year ending October 31, 1891.....	587	570	\$31 94	\$2 76	\$46 41	\$58 55	\$70 19	\$203 85
For the year ending October 31, 1892.....	624	546.62	19 21	4 94	44 04	43 75	61 55	173 79
For the year ending October 31, 1893.....	607	568.72	20 92	3 02	43 52	31 94	67 04	167 01
For the year ending October 31, 1894.....	644	556	21 51	5 20	44 64	38 74	69 76	179 85
For the year ending October 31, 1895.....	636	569	16 77	5 20	44 06	43 29	66 32	175 74
For the year ending October 31, 1896.....	623	550.75	20 34	3 42	45 26	36 16	58 23	163 41
For the year ending October 31, 1897.....	639	542.25	19 83	5 45	50 66	38 20	55 26	169 40
For the year ending October 31, 1898.....	639	546.25	20 19	8 88	52 34	35 52	54 48	171 41
For the year ending October 31, 1899.....	639	560.75	16 80	6 24	51 70	39 46	54 41	168 61
For the year ending October 31, 1900.....	641	567	17 73	5 29	51 90	33 32	57 63	165 87
For the year ending October 31, 1901.....	630	558.25	19 15	5 37	53 23	32 38	58 34	168 47
For the year ending October 31, 1902.....	603	541.5	13 58	6 46	55 15	36 96	62 37	154 52	\$3 52
For the year ending October 31, 1903.....	572	527.5	18 78	6 64	60 16	52 88	60 54	199 00	\$169 39
For the year ending October 31, 1904.....	577	512.75	13 02	13 65	64 52	51 60	62 73	205 52	173 00
For the year ending October 31, 1905.....	532	431.25	19 70	10 18	67 11	57 89	61 43	216 31	179 39
For the year ending October 31, 1906.....	516	452.5	17 77	11 05	75 78	76 49	61 21	236 30	212 75
For the eleven months ending September 30, 1907.....	473	444	16 93	10 32	71 01	65 36	56 86	220 48	215 97
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INDIANA SCHOOL FOR BLIND, INDIANAPOLIS.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.							Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Adminis- tration.	Office, Domestic and Outdoor Depts.	Sub- sistence.	Gross Main- tenance.			
For the year ending October 31, 1891.....	124	120	\$2 92	\$19 62	\$110 09	\$53 24	\$53 93	\$239 80			
For the year ending October 31, 1892.....	132	128 6	3 63	2 36	115 55	48 87	56 08	226 49			
For the year ending October 31, 1893.....	127	126 1	3 41	23 75	122 14	59 24	59 12	267 66			
For the year ending October 31, 1894.....	112	125 08	4 48	23 97	129 33	46 48	60 62	264 88			
For the year ending October 31, 1895.....	134	116 12	2 21	26 44	137 40	57 98	66 51	290 54			
For the year ending October 31, 1896.....	125	124 42	11	50	124 52	59 47	53 18	237 78			
For the year ending October 31, 1897.....	133	124 11	22	20 84	116 30	59 73	45 63	242 72			
For the year ending October 31, 1898.....	124	122 5	14	26 80	116 24	53 90	57 90	254 98			
For the year ending October 31, 1899.....	135	123 7	18	17 02	126 01	52 06	54 05	249 32			
For the year ending October 31, 1900.....	134	131 7	08	22 65	120 44	49 02	52 53	244 72			
For the year ending October 31, 1901.....	136	130 08		21 45	126 69	53 63	46 09	247 86			
For the year ending October 31, 1902.....	127	126 6	52	20 60	133 77	72 72	48 79	276 40			
For the year ending October 31, 1903.....	126	120 37	09	20 24	145 34	74 69	50 35	290 71			
For the year ending October 31, 1904.....	137	117 81		29 95	158 78	77 16	52 38	318 27			
For the year ending October 31, 1905.....	135	128 37		23 90	149 39	65 15	53 65	292 09			
For the year ending October 31, 1906.....	128	129 01		20 12	160 89	75 01	53 92	309 94			
For the eleven months ending September 30, 1907.....	125	128 37		17 82	148 98	66 64	52 11	285 55			

STATE PRISON, MICHIGAN CITY.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Deps.	Subsistence.	Gross Maintenance.		
For the year ending October 31, 1891.....	800	778	\$6 31	\$5 56	\$48 55	\$27 24	\$45 65	\$133 31	.....	.....
For the year ending October 31, 1892.....	764	793 25	6 87	3 64	46 92	26 77	41 88	126 06	.....	.....
For the year ending October 31, 1893.....	841	780 49	5 96	3 00	49 30	27 21	42 56	128 12	.....	.....
For the year ending October 31, 1894.....	908	927 45	4 19	1 60	41 79	24 72	35 82	107 82	.....	.....
For the year ending October 31, 1895.....	834	888 06	5 07	2 57	43 47	27 39	34 10	112 60	.....	.....
For the year ending October 31, 1896.....	842	853 25	6 88	7 55	45 49	25 56	31 44	116 92	.....	.....
For the year ending October 31, 1897.....	884	899 35	6 37	3 23	42 90	34 31	30 12	128 43	.....	.....
For the year ending October 31, 1898.....	782	829	4 22	4 22	45 87	41 80	32 32	128 43	.....	.....
For the year ending October 31, 1899.....	769	768 8	6 72	4 55	44 64	48 81	39 69	144 41	.....	.....
For the year ending October 31, 1900.....	822	800 68	5 93	4 37	43 12	39 71	36 33	129 46	.....	.....
For the year ending October 31, 1901.....	864	851 25	3 36	4 05	43 49	55 06	33 24	139 20	\$5 55	\$135 01
For the year ending October 31, 1902.....	796	840 64	3 29	5 92	45 93	40 62	37 56	133 32	4 55	143 75
For the year ending October 31, 1903.....	751	774 6	4 57	6 29	54 12	44 29	37 38	146 70	4 54	137 86
For the year ending October 31, 1904.....	833	795 35	4 47	6 29	57 75	45 26	35 83	149 15	3 81	150 69
For the year ending October 31, 1905.....	906	886	6 14	5 64	52 20	42 39	32 55	138 62	3 78	142 40
For the year ending October 31, 1906.....	950	918 9	5 26	5 44	51 24	38 71	30 61	131 26	4 24	135 50
For the eleven months ending September 30, 1907.....	1,062	1,017 7	5 65	4 50	42 12	36 68	31 89	120 54	3 31	123 85

BOARD OF STATE CHARITIES.

INDIANA REFORMATORY, JEFFERSONVILLE.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Depts.	Subsistence.	Gross Maintenance.		
For the year ending October 31, 1891.....	610	592.9	\$7 00	\$10 04	\$42 64	\$29 40	\$37 02	\$126 10	.....	.....
For the year ending October 31, 1892.....	619	592.75	7 72	4 18	43 01	26 18	36 02	117 11	.....	.....
For the year ending October 31, 1893.....	639	634.74	5 91	2 75	38 33	24 60	37 27	108 86	.....	.....
For the year ending October 31, 1894.....	770	708	7 69	11 14	33 22	21 04	32 84	105 93	.....	.....
For the year ending October 31, 1895.....	843	812	8 08	10 57	36 16	21 33	36 99	113 13	.....	.....
For the year ending October 31, 1896.....	817	826.66	7 01	7 06	35 80	20 17	32 78	102 82	.....	.....
For the year ending October 31, 1897.....	819	810.83	10 56	2 78	37 43	21 99	40 57	113 33	.....	.....
For the year ending October 31, 1898.....	941	908.89	7 10	6 98	34 49	25 71	40 48	114 76	.....	.....
For the year ending October 31, 1899.....	918	940.01	6 65	6 01	39 25	29 18	35 02	116 11	.....	.....
For the year ending October 31, 1900.....	877	877	5 52	6 71	43 87	39 44	40 03	135 57	.....	.....
For the year ending October 31, 1901.....	897	895	9 65	8 23	41 86	46 02	51 75	157 51	\$2 38	\$137 95
For the year ending October 31, 1902.....	923	912.29	5 98	3 59	42 28	37 86	40 97	130 68	1 72	159 23
For the year ending October 31, 1903.....	945	932.37	8 38	5 51	45 63	38 64	39 13	137 99	2 25	132 93
For the year ending October 31, 1904.....	998	975.64	10 31	5 12	52 01	42 59	37 96	147 99	1 75	139 04
For the year ending October 31, 1905.....	1,084	1,044.36	11 29	4 79	59 27	40 73	33 21	149 99	1 00	148 99
For the year ending October 31, 1906.....	1,093	1,094.84	10 10	4 56	61 12	39 91	32 69	148 38	68	149 97
For the eleven months ending September 30, 1907.....	1,175	1,144.85	7 97	4 00	56 00	43 97	30 12	142 06	58	142 64

INDUSTRIAL SCHOOL FOR GIRLS AND WOMAN'S PRISON, INDIANAPOLIS.

	POPULATION.		PER CAPITA COST OF MAINTENANCE.						Farm Products.	Maintenance, Including Farm Products.
	Enrolled.	Daily Average.	Clothing.	Repairs.	Administration.	Office, Domestic and Outdoor Depts.	Subsistence.	Gross Maintenance.		
For the year ending October 31, 1891.	241	199.2	\$18.25	\$36.78	\$50.72	\$53.81	\$41.14	\$200.70	.....	.....
For the year ending October 31, 1892.	191	185	17.53	31.16	61.96	68.66	36.91	216.22	.....	.....
For the year ending October 31, 1893.	202	192.98	13.12	2.51	65.72	53.86	36.97	171.48	.....	.....
For the year ending October 31, 1894.	260	204	21.39	27.12	65.97	58.89	47.22	220.59	.....	.....
For the year ending October 31, 1895.	305	206.5	20.80	35.50	64.32	55.04	42.25	217.91	.....	.....
For the year ending October 31, 1896.	332	230.5	14.66	3.94	62.25	54.46	40.39	175.70	.....	.....
For the year ending October 31, 1897.	312	251.5	18.52	17.81	53.25	36.79	34.66	161.03	.....	.....
For the year ending October 31, 1898.	319	250.92	15.74	9.76	49.75	45.97	36.32	157.54	.....	.....
For the year ending October 31, 1899.	309	236.3	17.92	10.40	53.84	51.21	38.02	171.39	.....	.....
For the year ending October 31, 1900.	304	234.67	14.38	13.85	59.53	44.30	39.90	171.96	.....	.....
For the year ending October 31, 1901.	190	212.75	12.44	8.30	64.90	50.36	41.21	177.21	.....	.....
For the year ending October 31, 1902.	227	210.44	9.73	15.26	65.09	63.30	38.17	191.55	.....	.....
For the year ending October 31, 1903.	253	239.23	12.54	12.83	60.13	48.70	32.18	166.38	.....	.....
For the year ending October 31, 1904.	255	256.09	9.81	9.24	55.07	52.49	30.30	156.91	.....	.....
For the year ending October 31, 1905.	292	266.01	12.09	15.22	56.36	47.21	29.06	159.94	.....	.....
For the year ending October 31, 1906.	312	309.10	12.11	8.41	54.52	46.75	34.19	155.98	.....	.....
For the eleven months ending September 30, 1907.	261	298.39	14.93	9.45	71.36	58.83	37.05	191.62	.....	.....
									\$2.90	\$174.86
									2.44	179.65
									3.62	195.17
									1.67	168.05
									1.63	158.54
									1.46	161.40
									1.58	157.66
									2.62	194.24

TEN YEARS OF THE INDETERMINATE SENTENCE.

Ten years ago last April Indiana enacted what are popularly termed the indeterminate sentence and parole laws. The same legislature created the Indiana Reformatory at Jeffersonville and named the prison at Michigan City the Indiana State Prison. These laws applied to both institutions and were afterwards extended to apply to the Indiana Woman's Prison at Indianapolis.

The indeterminate sentence and parole laws were attacked in the courts as unconstitutional, but were upheld by the Supreme Court of the State. This had been the decision of the courts of last resort in all the other States in which a similar question had been raised, except Michigan. In that State the laws were held to be unconstitutional, but the constitution of the State was amended and the laws were re-enacted.

There was considerable opposition to these laws in Indiana. Most of our people were uninformed concerning them. So wisely have they been administered by the authorities charged with that responsible duty that those who have become acquainted with their operations are now generally favorable to them. When one compares the old prison system with the new; the advantage to the State and the far greater benefit to the prisoners of the operations of these laws, who can say they are not a distinct gain for our commonwealth?

Most of us do not realize that there have been released in Indiana upon parole, after much training, from both the Reformatory and State Prison, 3,745 men, in the past ten years. Of these but 25 per cent. proved to be unsatisfactory. Most of these paroled men were unemployed when their offenses were committed. They had generally not been regular wage earners. Hence, it is interesting to learn that during the time they have been tested on parole, they have earned for themselves \$949,773.31.

The following figures show some of the results of the operation of these laws from the time the laws went into effect, April 1, 1897, to April 1, 1907:

	State Prison.	Reformatory.	Total.
Total number paroled	1,402	2,343	3,745
Received final discharge	831	1,253	2,084
Time expired while on parole	92	201	293
Returned for violation of parole	218	325	543
Delinquent and at large	114	309	423
Died on parole	29	48	77
At present reporting	118	207	325
Percentage of unsatisfactory cases.....	23.6	27	25.8

	State Prison.	Reformatory.	Total.
Total earnings of paroled men..	\$380,771 49	\$569,001 82	\$949,773 31
Expenses	275,964 18	486,463 50	762,427 68
Balance	\$104,807 31	\$82,538 32	\$187,345 63

These laws give the prison authorities an opportunity to release men who are deemed capable of becoming law-abiding citizens and to retain for a longer period those who have not shown satisfactory evidence of reformation. In actual practice this has resulted in considerably lengthening the average time of service in prison. A study of the records of the State Prison has brought out the fact that the last three hundred men received under the old form of definite sentence served an average of one year, nine months and fourteen days. The first three hundred received under the indeterminate sentence law served an average of three years, two months and twelve days, or one year, four months and twenty-eight days longer. A similar study of the Reformatory records discloses an average-sentence of one year, eight months and twenty-two days under the old law; two years, four months and six days, or seven months and fourteen days longer, under the new. When it is understood that this increase is due largely to the longer time served by men convicted of such crimes as incest and rape, the figures have an added significance.

During the year past an attempt has been made to learn how these laws are regarded from another standpoint. Letters were addressed to a number of paroled men and to their employers, requesting their candid opinion. The result was gratifying. While a number of employers had found the paroled prisoners unsatisfactory workmen, the majority expressed themselves as well satisfied, and many declared emphatically their belief in the value of the laws. Equally pleasing were the answers received from the men. The prevailing idea seems to have been expressed by one who wrote: "I think the indeterminate sentence law a much better law, both for the unfortunate boy and the citizens of the

State. It gives the first offender a chance to retrace his steps before it is too late."

Those who are interested in this subject will find valuable suggestions in the reports of the Indiana Reformatory and the Indiana State Prison, as well as in previous annual reports and publications of this Board. Among more recent papers and addresses on this phase of our penal system will be found an address by Governor J. Frank Hanly before the Indiana State Conference of Charities and Correction, at its meeting in Muncie in 1906 (see *Ind. Bul. Char. & Cor.*, June, 1907, p. 102); another by the same author before the National Prison Association at its meeting in Chicago in 1907 (see *Proc.*, 1907, p. —); a paper on "Suggestions as to Recent Criminal Statutes," by Solomon H. Esarey before the State Bar Association of Indiana at its meeting in 1906 (see *Transactions*, p. 54); a report on "The Indeterminate Sentence and Parole Laws," by a committee, of which Mr. Esarey was chairman, before the State Bar Association in 1907 (see *Transactions*, 1907, p. 190); a paper by Amos W. Butler on "The Reformatory System and Indeterminate Sentence," before a meeting called by the Iowa State Board of Control (see *Bul. of Iowa Institutions*, April, 1906, p. 129); and a paper by Richard M. Milburn on "The Indeterminate Sentence and Parole Laws" (see *Ind. Bul. Char. and Cor.*, December, 1907, p. 1).

EPILEPTICS.

We ought to feel grateful that Indiana has begun to make provision for the epileptics. At Newcastle, on 1,245 acres of land embracing the Blue River and both its bordering bluffs, are the possibilities of making a splendid institution for these unfortunates. There they can live a comparatively independent life, being permitted to do whatever their aptitudes and abilities will admit. There they may enjoy life with those who can sympathize with them and understand them. Heretofore they have been unwanted at home, unwelcome everywhere else. The new village as it grows should be theirs—a place into which they can be received and where they belong. The village can accommodate only its capacity. It can receive only as many as it can accommodate. There must be regulations about the order of the reception of villagers, and to be equitable a quota must be established for each county. The village should be conducted to secure the greatest good for the greatest number.

The latest figures on epileptics in institutions under the supervision of this board are as follows: Three hundred forty-three in the four State Hospitals for the Insane; 336 in the School for Feeble-Minded Youth; 256 in the county poor asylums; total, 935 (485 men and 450 women). Sixty-nine of these were children; 648 were between the ages of sixteen and forty-five; 218 were over forty-five. As is usually found to be the case, very few of these were afflicted with epilepsy alone, the majority being also insane or feeble-minded. All of those in the insane hospitals and fifty-six of the number reported from the county poor asylums, 399 in all, were insane; the number reported from the School for Feeble-Minded Youth and 116 of those in the county poor asylums, total 452, were feeble-minded. This leaves but 84 who had no marked mental deficiency. These figures are set forth more in detail in the tables which appear on subsequent pages.

The village was declared open for patients by proclamation issued by the Governor, August 19, 1907, which is as follows:

Whereas, Section 12 of an act authorizing and providing for the establishment and organization of the Indiana Village for Epileptics, approved March 6, 1905, provides that "When a sufficient number of buildings shall have been completed and equipped for the admission of patients, the Governor shall be advised of the fact and shall thereupon issue a proclamation to that effect."

And, Whereas, I have been advised by the Board of Trustees of the Indiana Village for Epileptics that a sufficient number of buildings have been completed and equipped for the admission of patients and that the same are now ready for the reception of patients as provided by said section and section 11 of said act.

Therefore, I, J. Frank Hanly, by virtue of the authority vested in me as the Governor of the State of Indiana, do hereby proclaim said Indiana Village for Epileptics to be sufficiently completed and equipped for the admission of patients and the same is hereby declared open to the admission of the same, according to the terms and provisions of said act.

In witness whereof, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Indiana.

Done at the Capitol, in the City of Indianapolis, this 19th day of August, in the year of our Lord 1907, in the year of the Independence of the United States the 132d, and in the year of the admission of the State of Indiana, the 91st.

(Signed)

J. FRANK HANLY,
Governor of Indiana.

By the Governor:

F. A. SIMS,

Secretary of State.

There have been received a few able-bodied, harmless men, those who can sleep in dormitories and will be benefited by the outdoor employment and open air life necessary in an institution at its beginning.

EPILEPTICS IN PUBLIC INSTITUTIONS.

	INSANE.			FEEBLE-MINDED.			WITH NO MARKED MENTAL DEFICIENCY.			AGGREGATE.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
State Hospitals for Insane.....	203	140	343	146	190	336	.....	.....	.....	203	140	343
School for Feeble-Minded Youth	34	22	56	50	66	116	.....	.....	.....	146	190	336
County Poor Asylums.....	237	162	399	196	256	452	52	32	84	136	120	256
Total.....							52	32	84	485	450	935

EPILEPTICS IN PUBLIC INSTITUTIONS CLASSIFIED BY AGES.

AGE.	STATE HOSPITALS FOR INSANE.												SCHOOL FOR FEEBLE-MINDED YOUTH.			COUNTY POOR ASYLUMS.			AGGREGATE.								
	Central.						Northern.						Eastern.			Southern.											
	Male.			Female.			Total.			Male.			Female.			Total.			Male.			Female.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.			
Under 16 years.....	79	46	125	33	25	58	8	8	16	1	1	36	30	66	99	1	1	2	38	31	69					
Sixteen and under 45.....	30	20	50	10	8	18	8	7	15	27	17	44	109	138	267	3	59	138	335	313	648						
Forty-five and over.....										7	9	16	1	2	3	56	60	116	112	106	218						
Total.....	109	66	175	43	33	76	16	15	31	35	26	61	146	190	336	136	120	256	485	450	935						

	SCHOOL FOR FEEBLE-MINDED YOUTH.			COUNTY POOR ASYLUMS.			AGGREGATE.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 16 years.....	36	30	66	1	1	2	38	31	69
Sixteen and under 45.....	109	158	267	79	59	138	335	313	648
Forty-five and over.....	1	2	3	56	60	116	112	106	218
Total.....	146	190	336	136	120	256	485	450	935

THE INSANE.

With all that we are doing for the insane, more must be done if our policy of State care for this unfortunate class is fulfilled. It is not maintained that insanity is growing out of proportion to the population. The State has declared in its constitution that it will care for all the insane, but this is not being done. The four existing hospitals have a combined capacity of 4,037, but information from different sources gives a total of 5,247 insane persons in the State. Even when the hospital now being erected at Madison is completed, it will add but one thousand beds, which is insufficient for present needs.

The four existing hospitals have 4,457 patients enrolled. The county poor asylums report 557 insane inmates and the county jails 54. An additional 179 is reported by county clerks as being in their own homes or with friends, awaiting transfer to the State hospitals. It cannot be said positively that all those reported as insane by the county poor asylums are so afflicted, as the superintendents do not always distinguish clearly between insanity and feeble-mindedness. Of the total number reported, there are 4,725 in public institutions and 522 not in institutions. Altogether 1,333 are not receiving State hospital care.

The Central Hospital, with a capacity of 1,631, has 1,859 patients present and 176 on furlough. There are 445 others outside the hospital, making a total of 2,480 in the district. This district includes the counties which will comprise the new southeastern district, and the new hospital, with its thousand beds, will greatly relieve the crowded condition of the central institution. Present records indicate 640 belonging to these counties. The two hospitals together will have a capacity of 2,631, which is 151 greater than the number of insane now reported from the district. However, the new institution will not be ready for occupancy for some time and it is probable that the insane in the district will have fully reached that number when the institution is opened.

The Northern Hospital is just completing two new cottages, which will bring its capacity up to 1,000. Its population on

September 30 was 868, and there were 101 on furlough. There are 89 others not receiving hospital care, making 1,058 in the district.

The eastern and southern districts are not so well provided for as the northern. There are 933 insane in the eastern district—736 in the hospital, 16 on furlough and 181 in the county institutions or at home—while the hospital capacity is but 742. In the southern district, the hospital, with a capacity of 664, has 651 patients present and 50 on furlough, and there are 75 without hospital care, making a total of 776 in the district.

With the State hospitals crowded as they are, the county poor asylums and jails are having to receive more and more of these unfortunates. While in some poor asylums which are not crowded the insane receive fair care under the circumstances, their condition in these institutions generally is deplorable. Without proper care or treatment, their chance of recovery is reduced to the minimum, and they will probably remain charges all their lives. A majority of the asylums report but a small number of insane inmates; eleven report none at all. The other extreme is found in the following counties: Floyd, 10; Dearborn, 11; Vigo, 20; Tippecanoe, 24; Vanderburgh, 28; Allen, 42, and Marion, which has a separate institution for this class, 171. The condition of insane persons in county jails is more pitiable. The sheriffs report 54 present on the last day of the fiscal year. There are also a number of epileptics in these institutions. As a rule their affliction is of an acute form, which prompt treatment would remedy or cure. It is extremely unfortunate that the State is not prepared to give them this chance.

To meet the needs of the insane, it is evident that the State must soon decide upon some general method of increasing its facilities for their care. We should guard against further enlargement of the existing hospitals. The Central is already too large for the best results. The plan of establishing a colony in connection with each hospital seems to offer a simple and effective remedy. With a farm sufficiently near to be under the management of the same superintendent, the hospital could give its harmless, chronic, able-bodied patients outdoor life and regular employment in all kinds of agricultural pursuits. Cottages could be constructed on these farms at a moderate cost. The patients would be better for the more active life and by their work could earn a portion of their maintenance. As transfers could be made readily, disturbed patients could easily be returned to the hospital. The experience of

other states with colonies for the insane has been so satisfactory that we should feel no hesitancy in adopting the system.

With the chronic patients removed to such colonies, the hospitals would be in better position to do real hospital work. Prompt treatment of acute cases is of the utmost importance. In order to be able to receive without delay everyone found to be needing treatment, the State should maintain a bed for every 500 of its population. Local institutions like the Indianapolis City Hospital should have a ward or pavilion for mild forms of mental and nervous diseases. It is also time for Indiana to be considering the establishment of another hospital. It should be located in the northern part of the State.

In this connection attention is directed to the splendid work being done by the Central Hospital for Insane in its pathological laboratory. Through the lectures and clinics given there regularly, medical students are gaining a practical knowledge which will enable them to detect and treat mental diseases in their incipient stages.

THE INSANE.

COUNTIES.	IN PUBLIC INSTITUTIONS.				NOT IN PUBLIC INSTITUTIONS.			AGGREGATE.
	State Hospitals.	County Poor Asylums.	County Jails.	Total.	On Furlough from State Hospitals.	At Home or with Friends Reported by County Clerks.	Total.	
Central.....	1,859	360	20	2,239	176	65	241	2,480
Northern.....	868	50	12	930	101	27	128	1,058
Eastern.....	736	95	18	849	16	68	84	933
Southern.....	651	52	4	707	50	19	69	776
Total.....	4,114	557	54	4,725	343	179	522	5,247

OUTDOOR POOR RELIEF IN 1906.

The township trustees now in office closed the second year of their respective terms December 31, 1906. Each of these 1,016 officials filed his reports of the year's poor relief as required by law and these were tabulated in the usual form. The results are given by counties and townships in the June, 1907, number of the Indiana Bulletin of Charities and Corrections, published by this Board.

The trustees, as overseers of the poor, gave outdoor aid amounting to \$233,612.70 during the year 1906. This is a reduction of \$16,271.98 from the expenditures for 1905, and is in fact less by several thousand dollars than the reports show for any one of the past eleven years except 1900. The present trustees have reduced the expenditures for poor relief very noticeably. Their predecessors during their four years in office spent an average of \$257,613.16 annually for this purpose, while the present incumbents in the two years they have acted as overseers of the poor have spent an average of \$241,748.69, and there is no question in our minds but that they have given equally good care to the poor.

While the net reduction from the total of 1905 is over \$16,000, the counties taken individually show comparatively slight change in the amount of relief given. In the majority the difference is but a few hundred dollars, either increase or decrease. The notable exceptions are Allen, Knox and Montgomery Counties.

In Allen County the outdoor relief in 1906 was \$9,063.88, an increase of \$1,964.11 over the amount reported for 1905. The bulk of this increase is in Wayne Township, which contains the city of Fort Wayne, and is due, we have been informed, to an unusual amount of sickness. Knox and Montgomery Counties on the other hand, show decided reductions in the amount of help given the poor. This is noteworthy because of the reputation these two counties have long held of aiding more persons in proportion to their population than any other counties in the State.

Vincennes Township, Knox County, reports relief in 1906 amounting to \$2,255.52. This is \$836.73 less than was given in

1905, and is practically half the sum expended in 1904. In Union Township, Montgomery County, the poor relief in 1906 amounted to \$3,841.37. The reduction from 1905, when the expense for this purpose was \$6,825.53, is \$2,984.16. The decrease is almost equal to the total expense in 1906.

Coincident with the reduction in the amount of poor relief is a notable decrease in the number of persons aided. The trustees report that 38,612 persons received assistance from the public in 1906. Looking back over the records for eleven years we find no one year in which the number aided was so low. The nearest approach to it was in 1903, when the trustees reported 40,012 persons aided. When it is remembered that in 1897 this number reached 82,235, the figures for 1906 are more striking.

The number of women aided in 1906 was 11,057, and there were 9,318 girls, making a total of 20,375 females. This is 2,138 in excess of the males, of whom the reports show a total of 18,237. Of boys under sixteen years of age, there were 8,867; from seventeen to twenty years, 485; and the remainder, the voters, number 8,885.

The theory of the poor relief law is that the trustees shall give only temporary aid, but it is occasionally found necessary to do more than this. With the consent of the commissioners, the trustees may render assistance as long as it is needed. The reports indicate that 9,559, or a little more than one-third of the whole number of persons aided received help on different occasions during three months or more. Classified by "color," 36,260 white and 2,352 colored persons were aided. Under "nativity," we find 29,706 Americans, 845 Irish and 1,818 Germans; the remaining 6,243 are unclassified or unspecified.

Each report of poor relief is expected to show the reason for giving aid and the occupation of the head of the family. The answers to these questions are incomplete and are not always capable of classification. However, from the information furnished the following facts may be stated: In a total of 12,658 reasons for aid, "sickness and burial" occurs 8,350 times. The next highest number is found under the heading "old age," 1,573. "Widowhood and non-support" was given as the cause for asking aid in 1,221 instances; mental or physical defect in 1,026 instances. The small number of applications for aid because of lack of employment, 488, is striking. Transportation was given 1,758 times. The tables will be found to show the occupation of 10,084 of the persons who applied for aid. Of laborers there were 8,025; 1,077 were housekeepers, 791 had skilled trades, 84 belonged to the pro-

fessions, 70 were farmers and 37 were clerks, agents or office employes. These and other facts will be found in the following tabulated statement:

STATISTICS FOR 1906.

Total number of persons receiving aid	38,612
Total number of males receiving aid	18,237
Total number of females receiving aid	20,375
Total number of times aid was given.....	62,859
Total number children 16 years and under.....	18,185
Total number males 17 to 20 years, inclusive	485
Total number males 21 to 60 years, inclusive	6,045
Total number females 17 to 60, inclusive	8,425
Number of persons 61 and over	4,757
Number of males 21 and over	8,885
Number of families aided	8,060
Number of white persons aided	36,260
Number of colored persons aided	2,352

Nationality—

American	29,706
Irish	845
German	1,818

Principal Reasons for Giving Relief—

Lack of employment	488
Sickness and bur'als	8,350
Old age	1,573
Widowhood and non-support	1,221
Insanity or idiocy	180
Blind, deaf or crippled	846
Number given transportation	1,758

Occupation of Those Aided—

Farmers	70
Housekeepers	1,077
Skilled trades	791
Clerks, agents, office employes	37
Professions	84
Laborers	8,025

Cost of Relief—

Total value of aid given	\$233,612 70
Average value of aid to each person aided	6 05

REPORT OF THE SECRETARY.

Ladies and Gentlemen—The duties of our office increase in number with each year. While conditions continue to improve in one direction or another, there are so many needs and so many lines of helpful activity waiting that we can but regret provision has not been made for doing more than can now be done. It is impossible, with the means provided, to cover the whole system of public charities with the supervision of which this board is charged.

Under the new laws the practice in many localities has had to change. To readjust the work to requirements has taken much time and necessitated the development of plans that many times have been slow. We have frequently been called upon to give such help as we could in this work and have attended various conferences or meetings in different parts of the State at which the laws and their practical application were explained. Those interested have spoken of the value of such gatherings, and in several instances new organizations or plans for improving or rebuilding unsatisfactory or insufficient structures have resulted. All this is encouraging, as showing an awakening of local interest and a disposition on the part of many of our best people to render valuable personal service for the help of the unfortunate and for the public good.

Visits have been made to the several State institutions and to many of the county and other local institutions, sometimes with members of the Board. As opportunity afforded, I have, as you wished, visited institutions without the State and we have been benefited thereby. The following classifies the 158 visits made during the eleven months which comprise the last fiscal year:

In Indiana:

State institutions	55
County poor asylums	12
County jails	18
Orphans' homes	1
City institutions	3
Private institutions	3
Miscellaneous	36

— 128

In other states

30

Total

158

Reports of these visits have been made to you with observations and suggestions concerning them. In addition to the visits made to the State institutions, the punishment records at the State Prison and the Woman's Prison have been examined. Special visits have been made by request of the Governor to several institutions and reports thereof have been made. Taken as a whole, our State institutions are in good condition, well conducted and economically run. When we have from time to time visited them, the inmates have been seen, their food inspected, their quarters examined. Any complaint has received attention; any unsatisfactory condition has been faithfully pointed out to those in authority. The conditions in these institutions are well known to us.

In connection with the work of the National Conference of Charities and Correction, I attended the State Conference of Charities and Correction in Minnesota at Red Wing, in Illinois at Chicago, Kentucky at Louisville, Missouri at Jefferson City, and Maryland at Baltimore; also local meetings with workers in New York City and Philadelphia. I was unable to accept invitations to several other State meetings, including Wisconsin, Nebraska and South Dakota. While attending some of these meetings, advantage was taken of the opportunity to hold conferences with persons or visit institutions that would be helpful in our work.

In our own State invitations have been accepted to speak at the meetings of a number of organizations, including the Northwestern Indiana M. E. Conference at Greencastle; the Indiana M. E. Conference at Columbus, and the synod of the Presbyterian Church at Evansville. Addresses have been made before churches, schools and clubs at various places. The increasing interest of the churches and clubs in questions of philanthropy is notable. Several of our State religious bodies have standing committees on charities and are doing good service.

Prison Sunday, the last Sunday in October each year, seems to have been pretty generally observed this year. An increasing number of churches are adding this practical and helpful special service to their calendar. Both the Indiana Reformatory and our office sent out considerable literature for use on that day. Out of all this interest on the part of church and school and club and individual comes what we need in the field of charities: an intelligent appreciation of the conditions we have and of what we are trying to do. This is the only way we can be established in what has been secured. Without the sympathy and support of the people, we could easily begin to retrograde.

We are accustomed to hear favorable expressions regarding the progress of the public charities and the charities laws of our State. That there have been great changes for the better in the past fifteen years and that our Legislature has enacted a number of wise and progressive laws we know. Yet there are conditions existing of which we cannot be proud and others that are a disgrace to the locality, a reproach to the State. When in some of our county jails there is really no separation of the sexes, so far as results are concerned; when the quarters are crowded far beyond their capacity and prisoners are "stacked up," to use the words of one sheriff—what excuse can we give for such shocking conditions? When in some of our poor asylums the insane are shackled, or whipped, or locked up in unsanitary rooms that are overrun with vermin—this is to our shame. When in some orphans' homes normal children are kept for years, to eat the bread of dependence and lack the influence of proper family homes to fit them for independent lives, it is an injustice to the children and to the State. When in some counties men and women decline to accept appointment upon boards of county charities and other local boards and are willing to see these things continue, they are putting aside a form of personal service that would result in much good to their fellow men and to the public.

These things should not be. Our jail system is a reproach to our people. The poor asylum conditions in many places are indescribably bad. We are not doing as efficient work in finding homes for children as some of our neighboring States. In many counties the great possibilities of local boards for good, and the chance afforded for real, helpful, personal service have not been recognized. We need to work to better conditions. To do this the creation of a proper public sentiment is necessary. Our people should be aroused. If they knew things as they are and their consequences, they would not stand for them. Their voices and their energies would be exerted in behalf of better conditions.

The secretary and members of this Board, as they visit jails, poor asylums and other local institutions, find many very bad conditions which call for such thoughts as those expressed above. While most of our poor asylums are improved; most of our jails are better; most of our orphans' homes are doing work of a higher standard and most of our counties have boards of county charities, still in a number one or more of the conditions above referred to exist.

As one visits one jail after another, he is impressed that even with such a bad thing as a bad jail system, there has been improve-

ment in recent years. This improvement is not general or uniform. It is not continuous in the same place. Yet here and there have come repairs, remodeling, new buildings or better administration. Comparing the present with the period several years back, there are better conditions. Where the bad conditions exist—and such places are not few—one is impressed with the fact that they are bad because the people of the community do not know the facts. A jail is not a pleasant place to visit at best and few persons visit it. Fewer still see conditions as they are and seldom does one in any measure comprehend the meaning of what may be learned. Our boards of county charities are doing a great work if they only visit and find out the conditions in the county jails and other local institutions and report to the public what they have learned. They have done such work in many counties with splendid results.

Boards of County Charities have been appointed the past year in Greene and Scott Counties. Such boards have now been appointed in seventy-four of the ninety-two counties of the State, though five of these—Brown, Kosciusko, Porter, Posey and Shelby—are inactive. The following counties do not have such boards; Boone, Dekalb, Fountain, Jennings, Lake, Marshall, Martin, Montgomery, Noble, Ohio, Pulaski, Ripley, Starke, Steuben, Switzerland, Union, Warren and Whitley. Boards of Children's Guardians have been appointed the past year in Benton, Boone, Brown, Carroll, Clay, Floyd, Franklin, Gibson, Greene, Hendricks, Huntington, Miami, Parke and Scott. There are now fifty-four boards of children's guardians in the State. The same number of counties have appointed probation officers. A complete list of these boards and officials will be found in the Indiana Bulletin of Charities and Correction for December, 1907.

With the time for the selection of superintendents of county poor asylums last June, came quite a number of changes. Many new faces appeared in the management when the new term began September 1. There are indeed few of those left in active service who were engaged in the important work of superintending our county poor asylums ten years ago.

We are required under the law to examine all plans for new jails and poor asylums before they can be adopted by the county authorities. Plans have been submitted to this Board for proposed new jails in the following counties: Greene, Vigo, and Warren; also for remodeling the jail in Sullivan County. We have also examined the plans for new poor asylums in the counties of Dekalb, Clarke, Parke, and White; for a new hospital building at the

Howard County Poor Asylum and for a new custodial building in Union County. The new fire proof poor asylum in St. Joseph County, near South Bend,*has been completed and is occupied, as has also the new poor asylum in Pike County. We have examined the plans for the new buildings for the Epileptic Village at Newcastle; for the new hospital for the Soldiers' Home at Lafayette, and for the addition to Sunset Cottage at the School for Feeble-Minded Youth at Fort Wayne.

The past year we have had in the field regularly four agents engaged in the work with dependent children. Their inability to do all that is expected of them under the law is apparent. The next legislature certainly ought to make provision for two additional agents, and we ought also to pay our present agents more than they are now receiving.

The various orphans' homes of the State have done their work this year much as usual. They have promptly made their reports to our office. They have generally been kind and co-operative in their attitude toward our representatives. Much good work in child-saving is being done by them. There are now forty-one local children's institutions in the State receiving more or less support from the public funds. These have an aggregate capacity of 2,833; a population of 1,582. This leaves 1,251 vacant beds. For years the existing children's institutions receiving public support have had quarters for more than a thousand more children than their united population. Notwithstanding this, every once in a while there springs up through some imagined need a sentiment in favor of a new orphans' home in one locality or another. Could these well-intentioned persons investigate the conditions they would understand that there are many more beds for children in existing institutions today than there are children offered to fill them. In fact there is now a competition among organizations to get children with which to fill their homes. It is possible for a county to provide as good care for its dependent children at less expense than would be possible by establishing a new orphans' home and this does not take into account the cost of a new children's institution or the interest upon the investment.

Early in the past fall the heads of the three penal institutions met at our office to consider with us the question of a uniform form for the commitment of prisoners to those institutions. With the co-operation of the Attorney-General, such a blank was prepared, which promises to be satisfactory to meet that need.

The Board of State Truancy for the past year has been com-

posed of Amos W. Butler, president; C. N. Kendall, secretary, and the county superintendent in each county, who is the local representative. The administration of the law has shown good results, but we believe they should be still better.

A number of visitors have recently come to our State especially to study our institutions. The Governor of Michigan and some members of the legislature of that State visited the State Prison at Michigan City, to study the binder twine industry. Representatives of the Boards of Control of both Wisconsin and Minnesota and of the Cuban government also visited the same prison. General Manuel Garcia Velez and other members of the delegation from Cuba to the American Prison Congress in Chicago visited the Indiana Reformatory at Jeffersonville.

At our own office we have been gratified to have some of the leading workers in charitable activity. It has been a pleasure to have them investigate our work and make use of our records. Among those who favored us were Dr. Leonard Stocking, superintendent of the State Hospital for Insane, which was destroyed by the earthquake at Agnews, California; John M. Glenn, director and secretary of the Russell Sage Foundation; Wm. C. Graves, secretary of the Illinois Board of State Charities, and Homer Folks, secretary of the New York State Charities Aid Association.

The work of our local charities everywhere continues active. There have been some changes in one way or another. Among others are three changes in the position of secretary of the Associated Charities. Miss Harriet Anderson, who goes to the Chicago Bureau of Charities, has been succeeded at Muncie by her sister, Miss Luella Anderson. Miss Maud Pryor, who did efficient work at Anderson, has been succeeded by Miss Gertrude McCleery. Miss Rhoda Welding, of the Indianapolis Charity Organization Society, has become secretary of the Society for Organizing Charity, at Terre Haute. Judge S. B. Davis, at the end of twenty-five years' faithful service as president of the Terre Haute society, voluntarily lays down the burdens of that office. In Mr. Wm. C. Ball the organization has found a worthy successor to the one who retires.

Visits to the Indianapolis Police Station the past year have shown a gratifying improvement over its condition at the time of former inspections. It was in the best condition in which it has ever been found. A report of the condition was made to the mayor of the city and his attention was called to the lack of accommodations for insane who were held awaiting admission to the hospital for the insane, some of whom are locked up in the police station or the county

jail. In that connection the suggestion was made that in planning for the new work at the city hospital, provision should be made for quarters where such insane could be temporarily under proper care.

The law passed by the last legislature providing that the Indianapolis Board of Health and Charities shall be bipartisan, consisting of four members, is a progressive measure. This frees the City Hospital and the Free Dispensary from political control. The appointment of all employes is left wholly to the superintendent.

The office work continues heavy. It was found necessary to employ an additional clerk for a few weeks. Never before have we had such a volume of correspondence as in the past year. More time than usual has been devoted to the registration of institution inmates and it is now fuller than ever before. Special effort has been made to obtain all possible information regarding the family history of these persons and valuable facts are constantly being added to our records. There are now 74,885 names in this registration.

Within the year we have printed and sent out the usual publications of the Board. The annual report for 1906, together with the December number of the Indiana Bulletin of Charities and Correction, was distributed during the session of the General Assembly. In the Bulletin for March, 1907, appeared the new laws relating to charities and corrections. The June number contained the proceedings of the State Conference, held in Muncie the previous October; the statistics of outdoor poor relief for the year 1906, and the blanks prepared with the assistance of the Attorney-General to conform to the requirements of the new laws governing the care of dependent, neglected and delinquent children. The reports of the various boards of county charities appeared in the September number. Forty-one hundred copies of this Bulletin are printed quarterly. Each number gives detailed information concerning the movement of population and the financial operations of the State institutions. They are a very helpful part of the Board's work and there is a constant demand for them.

It is a pleasure to speak of the cordial relations existing between the Board of State Charities and the public press, and to acknowledge our indebtedness to its co-operation. In its efforts for the social welfare of the State, the Board depends largely upon public interest and support, and in securing this the press has been very helpful.

The following persons compose the office force: Miss Laura Greely, chief clerk; Misses Moffett Richards, Mabel Whisner, Anna

L. Vesey and Grace P. Hargitt, clerks. Mr. Perry N. Hiser, State agent in charge of the work with children who are public wards, has resigned to accept the position of secretary of the Associated Charities, Peoria, Ill. Our best wishes go with him. The other agents are Miss Mary Carmichael, Mark A. Smith and Miss Leila M. Thomas. All these faithful workers are very much appreciated.

In closing I want to express to each member of the Board my deep appreciation of his kindly sympathy and constant encouragement.

Respectfully,

AMOS W. BUTLER, Secretary.

THE TRUANCY LAW AND ITS WORK.

Every county in the State is entitled under the compulsory school attendance law to a truant officer, appointed by the County Board of Education. Habitual tardiness or absence from school brings a child within the jurisdiction of the truant officer, and if, after proper notice, the child continues delinquent, the parents or guardians may be brought into court and, upon conviction, fined in any sum not less than \$5.00 nor more than \$25.00, to which may be added imprisonment in the county jail not less than two nor more than ninety days. The law applies to children between the ages of seven and fourteen years, inclusive, and covers the school term of the corporation where the children reside.

With the exception of Jennings County, where no appropriation to carry out the law was made, each county in the State has its truant officer, those containing larger cities employing from two to six such officials. Each of these during the past year has made the report required by the State Truancy Board, and the tabulated results are shown below.

The truant officers are 111 in number. Their reports indicate that during the school term 1906-7, 22,006 children were brought into school who had either not been in school before or whose attendance was irregular. Of this number, 21,049 went to the public schools and 957 to private or parochial schools. It was found necessary to provide clothing or books for 7,609 of these, and the assistance so given amounted in value to \$18,896.73, an average of \$2.48 for each child aided. In the administration of their offices the truant officers spent 16,313 days in service and made 67,918 visits. Their salaries amounted to \$32,822.50. This sum added to the aid given the children makes the total cost of administering the law amount to \$51,719.23, an average of \$2.35 for each child brought into school.

It is interesting to note in the truant officers' reports the extent to which it was found necessary to prosecute parents or guardians under this law. A total of 396 cases was taken into court during the year, and of this number 345 proved successful, 50 failed and one is still pending. In 41 counties no prosecutions were found

necessary; in 31 counties the number was from one to five each; in 11 counties there were from five to 10 each; in four counties, from 10 to 20 each; and in the remaining five the record was as follows: Madison, 23; Marion, 25; Lake, 27; St. Joseph, 38; Floyd, 86. The truant officer for Floyd County writes in explanation of the high number of prosecutions in his county that sixty-four of the complaints were against parents or guardians for failure to comply with the law and twenty-two were against children for truancy.

The truancy law now in force in this State was enacted by the General Assembly of 1901 and is found in Chapter 209 of the Acts of that session. Compulsory education, however, has been on the statutes of Indiana since 1897, the 1901 enactment being merely a revision of former laws. After a trial of ten years it may be stated most emphatically that the law is popular and effective in by far the greater number of counties of the State, though in a few it is only partially enforced. From time to time a bill is introduced in the General Assembly from some county where it is thought a change will better adapt the law to local conditions, but the legislature has wisely refrained from any material modifications of the original statute. The law has proved its worth, the majority of truant officers reporting marked improvement in school attendance from year to year.

The tabulated statement on a subsequent page will be found instructive as showing the number of children brought into school and the attendant expense in each of the past ten years. The conclusions to be drawn are further borne out by records in the Department of Public Instruction, showing the change in school attendance since the enactment of the truancy law. This has been summarized as follows: "During the ten years before the law was passed, the percentage of enrollment of pupils in the schools of the State, based upon the enumeration, was 67.8. During the ten years after the law was passed the percentage increased 6.5, or to 74.3. The actual attendance of children increased from 48.1 to 57.5, or 9.4 per cent."

STATISTICS, 1906-1907.

Number of truant officers	111
Number of days spent in the service.....	16,313¼
Number of visits made	67,918
Number of pupils brought into school:	
To public schools	21,049
To private schools	957
Total	22,006

Number of children aided:

To attend public schools	7,349
To attend private schools	260

Total 7,609

Number of prosecutions:

Successful	345
Unsuccessful	50
Pending	1

Total 396

Cost of administering the law:

Salaries to truant officers.....	\$32,822 50
Assistance to children	18,896 73

Cost per capita for children brought into school..... \$2 35

Cost per capita of assistance given 2 48

RESULTS OF TRUANCY LAW 1898-1907.

YEAR.	NO. OF OFFICERS.	NO. OF CHILDREN BROUGHT IN.	NO. OF PROSECUTIONS.	SALARIES.	AID GIVEN.	TOTAL COST.
1898.....	237	21,447	.....	\$35,544 76	\$15,806 43	\$51,351 04
1899.....	194	19,160	113	28,028 00	15,414 54	43,442 54
1900.....	106	28,974	272	27,781 37	20,562 94	48,344 31
1901.....	108	25,025	199	27,885 50	19,801 48	47,686 98
1902.....	110	24,784	325	19,555 75	17,190 05	36,745 80
1903.....	110	23,267	325	19,209 91	20,215 02	39,424 93
1904.....	111	22,597	303	22,327 73	17,836 50	40,164 23
1905.....	112	22,789	236	32,490 00	19,311 86	51,801 86
1906.....	111	23,297	261	31,878 10	21,267 88	53,145 98
1907.....	111	22,006	396	32,822 50	18,896 73	51,719 23

COUNTY POOR ASYLUMS.

The county poor asylum has often been called the "dumping ground" of the wrecks and failures of humanity. A glance at the accompanying table would seem to justify the name. On August 31, 1907, the 92 asylums of Indiana and the Marion County Asylum for Incurable Insane had 3,165 inmates: 2,062 men and 1,103 women. Nine hundred eleven were feeble-minded; 557 insane and 256 epileptic. Fifty-six of the epileptics were insane and 116 were feeble-minded, leaving 84 with no marked mental deficiency. These three classes make a total of 1,552, or 49 per cent. of the total number of inmates. Six hundred eleven were reported as feeble through old age; 229 sick and 77 able-bodied. The remaining 696, as well as 104 who were also insane, feeble-minded or epileptic and are counted under those headings, were crippled, deaf, blind or paralytic. Classified by age, the inmates under seventeen years of age numbered 35; between 17 and 60 years of age, 1,584; over 60 years of age, 1,546.

Attention has frequently been called to the slight change in the poor asylum population from year to year. A census taken on August 31st of this year shows 99 fewer inmates than were reported on the same day in 1890, the first year a census was taken by this Board. A partial explanation of this lies in the steady growth of the State institutions, which now have practically double their population in 1890.

There is, however, another explanation. In the past seventeen years there has been a large increase in the population of the State, and had men and women and children been received as freely and in the same proportion this year as they were a decade or more ago, the asylums would no doubt be filled. Under present laws able-bodied inmates are required to assist in the farm work. Refusal to work means dismissal and the result is a striking reduction in the number of able-bodied inmates. The matter of legal settlement is more carefully investigated by township trustees, who alone have authority to remove paupers to the poor asylum. The regulation of public outdoor relief, which has brought about an annual reduction of \$337,000 in the amount of aid given, has doubtless in-

culcated habits which have kept many away, not only from the overseers' office, but from the poor asylums. Since 1897 we have had a law prohibiting the maintenance of children in county asylums, and as a result there are present now less than fifty instead of from three hundred to five hundred children once to be found there. All these things are working together to good advantage, and the results are gratifying.

The tables which follow give statistics for each of the 92 poor asylums and the Marion County Asylum for Incurable Insane.

CENSUS OF POOR ASYLUM INMATES, AUGUST 31, 1907.

	Males.	Females.	Total.
Under 3 years	5	11	16
3 and under 17	6	13	19
17 and under 30	137	82	219
30 and under 45	337	197	534
45 and under 60	566	265	831
60 and under 75	646	305	951
75 and over	365	230	595
Total	2,062	1,103	3,165

POOR ASYLUM INMATES, CLASSIFIED, AUGUST 31, 1907.

COUNTIES.	MENTAL AND PHYSICAL CONDITION.																TOTAL POPULATION.					
	Feeble-Minded.		Insane.		Epileptic.		Paralytic.		Crippled.		Deaf.		Blind.		Feeble-Senile.				Sickly.		Able-Bodied.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			Male.	Female.	Male.	Female.
Adams.....	8	7	2	2	1	2	1	1	1	1	.....	.....	2	1	8	5	.....	.....	.....	2	19	39
Allen.....	11	14	26	16	6	6	2	3	10	1	.....	.....	3	3	26	9	.....	22	2	.....	46	148
Bartholomew.....	4	8	1	1	2	1	.....	2	1	.....	4	1	1	3	1	.....	.....	.....	1	.....	13	26
Benton.....	3	1	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	9	10
Blackford.....	2	2	2	2	4	2	.....	.....	6	3	1	.....	3	.....	1	.....	1	1	.....	.....	15	24
Boone.....	1	5	3	1	2	2	1	1	1	1	1	.....	1	1	4	2	1	.....	4	2	11	28
Brown.....	2	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	4	6
Carroll.....	3	2	2	2	2	1	1	1	2	1	1	.....	1	.....	1	.....	.....	1	.....	1	15	17
Cass.....	2	2	1	1	2	2	3	.....	6	.....	.....	.....	2	.....	16	1	4	.....	.....	.....	37	42
Clark.....	4	4	7	1	1	1	1	.....	1	.....	1	1	1	.....	3	2	.....	.....	1	.....	19	27
Clay.....	3	5	8	1	2	3	1	.....	3	1	4	1	4	1	7	5	3	.....	.....	.....	27	39
Clinton.....	5	2	6	1	3	1	1	.....	1	1	2	1	1	1	4	6	1	.....	2	.....	22	36
Crawford.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	2	.....	.....	.....	5	8	
Daviess.....	8	4	2	.....	1	.....	.....	.....	3	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....	16	21
Dearborn.....	4	3	8	3	2	1	1	.....	5	.....	1	.....	2	.....	6	2	3	1	2	.....	33	42
Decatur.....	6	5	1	.....	1	2	1	1	1	1	.....	.....	2	1	2	.....	.....	.....	.....	.....	13	23
Dekalb.....	6	8	3	.....	1	3	2	2	4	1	2	.....	1	.....	4	2	2	.....	.....	.....	24	40
Delaware.....	6	6	1	.....	5	.....	.....	.....	6	1	.....	.....	.....	.....	15	1	4	.....	.....	36	45	
Dubuois.....	1	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	1	2	1	.....	.....	6	9	10
Elkhart.....	6	12	1	.....	1	4	6	2	9	3	3	1	2	1	4	2	4	1	.....	34	23	57
Fayette.....	1	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	.....	9	15	24
Floyd.....	6	9	6	4	.....	1	2	1	1	2	1	1	1	1	5	5	1	2	.....	26	22	48
Fountain.....	2	5	1	2	3	1	1	.....	2	2	.....	.....	3	.....	8	5	1	1	.....	24	13	37
Franklin.....	10	9	2	3	1	2	.....	.....	5	3	.....	.....	.....	.....	2	.....	1	3	.....	21	13	33

Fulton.....	3	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	12	8	20	
Gbson.....	3	1	2	1	1	2	1	2	1	2	1	1	1	1	1	1	12	7	19	
Grant.....	8	2	5	3	4	7	2	4	1	1	1	1	1	1	1	1	35	56	3	
Greene.....	4	6	1	3	1	2	1	1	1	1	1	1	1	1	1	1	14	12	26	
Hamilton.....	6	7	5	4	3	3	3	1	2	1	...	...	1	3	4	3	1	20	19
Hancock.....	4	2	...	...	...	...	...	...	1	...	...	...	2	...	...	...	5	7	12
Harrison.....	4	5	3	...	1	1	...	...	...	...	...	...	4	...	...	...	11	5	16
Hendricks.....	4	6	2	1	...	...	...	...	...	...	...	...	1	...	3	2	14	16	30
Henry.....	8	10	2	3	3	...	...	...	2	...	...	...	1	...	1	...	18	19	37
Howard.....	6	7	1	2	2	3	3	2	3	2	...	...	2	...	1	1	18	17	35
Huntington.....	9	5	4	...	...	...	...	...	...	...	...	...	1	...	1	...	27	8	3
Jackson.....	8	8	4	3	4	3	...	6	3	...	...	...	1	...	1	1	19	12	31
Jasper.....	1	2	3	...	1	...	2	2	...	...	...	...	...	...	...	...	10	3	13
Jay.....	11	12	1	5	3	5	3	2	1	1	1	1	2	1	1	1	24	22	46	
Jefferson.....	6	4	3	2	1	3	3	1	6	1	...	1	2	1	2	3	25	13	38	
Jennings.....	8	4	2	1	1	2	1	4	...	...	...	1	1	1	1	...	21	5	26
Johnson.....	1	2	1	...	2	2	3	...	...	...	...	...	...	...	...	...	11	7	18
Knox.....	6	6	2	1	...	...	...	...	3	...	...	...	2	...	...	...	22	7	29
Koschusko.....	10	8	1	3	1	3	1	2	2	...	...	...	...	...	1	...	24	21	45
Lagrange.....	4	1	...	1	...	...	...	1	...	...	...	...	...	...	...	6	5	11	...
Lake.....	5	4	4	...	...	...	3	2	5	...	...	...	1	...	...	...	32	9	41
Laporte.....	4	12	3	3	1	3	3	2	1	4	1	...	1	1	1	...	30	24	54	
Lawrence.....	4	4	4	1	...	...	...	2	2	...	...	1	3	2	3	...	19	13	32
Madison.....	8	10	4	3	2	2	2	...	...	...	...	3	3	3	2	1	21	20	41
Marion.....	10	5	...	...	1	2	16	3	29	13	1	1	19	3	...	15	2	39	175
Marion County Insane Asylum.....	16	4	119	52	12	6	19	2	...	...	2	2	1	1	...	...	137	56	193
Marshall.....	10	7	1	...	1	6	...	...	3	...	1	...	1	...	...	5	5	12	37
Martin.....	3	5	3	...	2	...	...	1	1	1	1	...	3	...	1	1	10	9	19
Miami.....	2	4	...	1	...	...	1	...	8	4	...	...	...	...	...	...	18	13	31
Monroe.....	4	2	3	1	3	...	...	1	...	...	1	...	1	...	5	...	14	28	14
Montgomery.....	11	7	3	2	1	1	1	2	7	...	3	1	3	1	4	2	34	17	51	
Morgan.....	6	7	2	1	2	2	3	...	2	4	...	...	2	...	...	1	20	16	36
Newton.....	3	1	1	...	...	...	...	...	1	...	...	...	...	...	...	...	8	2	10
Noble.....	5	3	2	...	1	1	...	...	...	...	1	...	...	...	...	1	12	5	17
Ohio.....	1	1	...	...	...	...	...	...	...	...	...	...	1	...	...	2	2	3	...
Orange.....	6	3	1	...	...	...	...	...	1	...	...	...	...	...	...	9	6	15	...
Owen.....	2	2	4	1	1	...	1	...	2	1	...	5	16	...
Parke.....	2	5	5	1	3	...	2	1	2	1	1	1	2	...	...	...	15	8	23
Perry.....	3	3	1	2	2	2	1	1	1	1	2	2	2	...	...	1	10	5	14
Pike.....	1	4	...	...	2	2	1	1	1	1	1	1	2	...	...	1	10	11	21

Warwick.....	2	2	1	3	2	1	1	2	2	2	1	1	1	2	2	1	7	1	3	10
Washington.....	15	4	4	1	1	1	1	1	2	2	1	1	1	2	2	1	29	16	45	
Wayne.....	14	2	2	1	6	1	3	2	3	3	1	3	2	1	1	2	41	13	54	
Wells.....	9	8	1	2	2	4	1	3	4	1	4	2	2	2	2	1	21	11	32	
White.....	4	4	1	1	1	1	1	1	1	1	1	5	2	1	1	1	11	7	18	
Whitley.....	5	9	2	5	5	2	2	1	1	1	2	2	1	1	1	1	15	15	30	
Total.....	482	429	383	174	136	120	169	54	251	76	44	33	125	48	419	192	2,062	1,103	3,165	

COUNTY PRISONS.

The law allows each county in the State to have a jail. Each county, except one, Pulaski, has such a prison. Authority is also granted for the maintenance of a workhouse if it is needed. Marion is the only county in the State which has a workhouse.

On September 30, 1907, the last day of the fiscal year, these institutions had a population of 1,326, 1,202 men and 124 women. This is an increase of 264 over the number present at the close of the preceding fiscal year. The increase is found in certain of the larger counties and those in which the manufacturing interests are greatest. Of the number present on September 30, 1907, 752 men and 70 women were serving sentence; 382 men and 40 women were awaiting trial; 45 men and 12 women were insane; 20 men and two women were held temporarily as witnesses or for safe keeping, etc. There were also three tramps in jail on the date mentioned.

These figures refer only to the population of the jails on a certain day. The sheriffs further report 30,622 men and 2,868 women, a total of 33,490, admitted to the jails from November 1, 1906, to September 30, 1907, a period of eleven months. This is 174 more than were reported in the preceding twelve months. Of these, 21,147, or 63 per cent., served sentence; 609 were insane persons awaiting transfer to the insane hospitals or held for safe-keeping; 2,001 were tramps. The remaining 9,733 were in jail for miscellaneous reasons. They include those who were discharged after trial as not guilty, witnesses, fugitives, etc.

These figures are compiled from annual statistical reports made to this office by the sheriffs of the ninety-two counties and the superintendent of the Marion County Workhouse. In addition the Board receives from each of these officials a monthly report which gives the name of every person admitted to the jail, his age, sex, color, nationality, the cause of his imprisonment, date of admission and discharge, and the cost of his board.

The most striking thing noticed in these reports is the large numbers received because of intoxication and vagrancy. There were 2,007 vagrants in the jails during the past eleven months and 14,368 persons because of drunkenness—a total of 16,375 for these

two causes alone. The following classification of these persons by ages shows that nearly one-half were less than thirty-five years old. It is a shocking thing to find included in the number of drunken persons, forty children under the age of sixteen.

Age.	Vagrancy.	Intoxication.	Total.
Sixteen and under	39	40	79
Seventeen and under 35.....	1,030	6,511	7,541
Thirty-six and under 50.....	543	5,084	5,627
Over 50	377	2,270	2,647
Not given	18	463	481
Total	2,007	14,368	16,375

One point which these reports have made clear is that in many counties the jails have been used as boarding houses for tramps. Against this custom the Board has protested without ceasing, and it has therefore been gratified to note a reduction from year to year in the number of this class of jail inmates. In 1902, the first year the reports were received, 4,101 tramps were reported; in 1907, 2,007, a decrease of 51 per cent.

The county which has had the most noted part in bringing about this reduction is Tippecanoe. Of the 4,101 tramps in all the county jails in 1902, 632, or fifteen per cent., were reported from the jail at Lafayette. The average for the remaining ninety-one counties was thirty-eight each. This year instead of 632, the sheriff reports but forty-two tramps, or less than two per cent. of the whole number for the State. The average for the remaining ninety-one counties this year is twenty-one each. In the five years from 1902 to 1906, inclusive, the jail at Lafayette has cared for a total of 3,526 tramps, an average of 705 per year. A reduction from 705 to 42 reflects credit upon whoever is responsible for it. It goes without saying that it is the result of a change in method rather than in actual needs.

Another county to whose record for vagrancy attention has frequently been called is Vigo, containing the city of Terre Haute. In the five years immediately preceding 1907, there were 1,823 tramps in this jail, ranging from 62 in 1903, to 823 in 1905. The average was 364 annually for the period. In the past year this jail received 147 tramps.

The 2,007 vagrants reported in 1907 were distributed over 65 of the 92 counties in the State. The highest number was reported from the most populous county in the State—272 from Marion. This includes both the county jail and the workhouse. Montgom-

ery County follows with 186, then Vigo with 147. These three are the only counties which have admitted more than 100 vagrants to their jails during the year. There were twenty-seven which had no tramps and twenty-six which had fewer than ten each.

One of the counties which had no tramps was Vanderburgh, which ranks third in population. This was due to the fact that Evansville has a municipal lodging house, managed by the Associated Charities. The 1907 report of the Associated Charities says: "The Municipal Lodging House, with its work test, scares away the vagrants, tramps, beggars, etc. We have cared for twenty-five per cent. less this year than last year, yet we have provided for all who came or were sent to us. One hundred ninety-seven of these tramps, cripples and homeless men, women and children have been cared for during the past year." Marion and Vigo counties would doubtless have had more tramps in their jails had it not been for the work of the "friendly inns" maintained by the Charity Organization Societies in Indianapolis and Terre Haute.

Of the 2,007 vagrants reported from the jails and the Marion County Workhouse, 1,966 were males and 41 were females. Thirty-nine were under sixteen years of age; 1,030 were seventeen and under thirty-five; 543 were thirty-six and under fifty; 377 were over fifty years, and of 18 the age was not reported.

The allowance to the sheriffs for boarding tramps this year amounted to \$3,517.15. In 1902, it was \$4,389.17. It may seem surprising that with a reduction of 51 per cent. in the number of tramps received in 1907 compared with 1902, there is a difference of only \$872.12 in the expense of their board. The explanation of this doubtless lies in the fact that many of the tramps received this year were regularly committed on the charge of vagrancy for a specified time and have remained longer than did those who were simply given lodging over night. For example, in Tippecanoe County in 1902, when 1,040 tramps were received, the cost of board to the county was \$476.20, an average of 46 cents per capita. In 1907 the same jail received 42 tramps and their board amounted to \$244.40, an average of \$5.82 each. While this may at first seem startling, on second thought it will be conceded better for a county under proper circumstances to spend \$244.40 on 42 tramps than only double the amount on twenty-five times the number.

The custom of charging two days' board, or 80 cents, for jail inmates who are admitted one day and discharged the next, seems to obtain in most counties of the State. We do not say that the law is being violated by the sheriffs who do this, but the proba-

bilities are that it is. The law allowing sheriffs 40 cents a day each for boarding prisoners has been held to mean a full day of three meals. The sheriffs' reports show large numbers of tramps received one day and discharged the next, for each of whom 80 cents board was charged. It is not likely that these men came in to the jail before breakfast one day and remained until after supper the following day. The probabilities are also that they were neither received nor discharged under due process of law, in which event the sheriff could not legally collect one penny for their board. In looking over a few of the jail reports in this connection, we have noted the following: Sixty-five tramps were admitted to the Hancock County jail during the past eleven months. Fifty-five came one day and were discharged the next, and for each the sheriff collected 80 cents from the county for board. The same was true of 50 tramps out of 51 admitted to the Johnson County jail; of 33 out of 37 admitted to the Kosciusko County jail; of 52 out of 59 admitted to the Monroe County jail; of 158 out of 186 admitted to the Montgomery County jail; of 31 out of 33 admitted to the Parke County jail; of 74 out of 77 admitted to the Sullivan County jail.

While, as stated above, recent reports indicate a gratifying reduction in the number of tramps admitted to the county jails, we feel that the number is still too large. They are a pest which can be encouraged. The expense of their board is a slight burden upon the public compared with that which inevitably results from their presence in a community in the way of petty pilfering, fires and attacks upon women and children. No one but the sheriff profits when a county permits its jail to be used as a free hotel for that class.

The decrease in the number of tramps in the jails the past year is more than balanced by the increase in the number charged with intoxication. In the past six years the jails have received an average of 12,624 persons annually because of drunkenness. The amount paid the sheriffs for boarding them has averaged \$33,973.22 annually in the period given. The figures for the fiscal year just closed, which included only eleven months, are higher than the average—14,361 prisoners because of intoxication and \$42,976.65 for their board.

There are but two counties in the State which report no drunkards in jail: Brown and Ripley. In the past six years Brown County has had but four commitments for intoxication and Ripley but nine. Other counties which report a small number this year are: Benton, Crawford, Franklin, Harrison, Jasper, La-

Grange, Orange, Pulaski, Starke, Switzerland, Warren and Whitely, each less than ten. On the other hand eleven counties report 300 or more, as follows: Clinton, 303; Cass, 337; Allen and Lawrence, 348 each; Putnam, 372; Delaware and Madison, 417 each; St. Joseph, 537; Grant, 604; Vigo, 1,634 and Marion, 2,112.

The most striking thing about this list is the record of Vigo County. With its 62,035 inhabitants, it ranks fifth in population among the counties of the State. The combined population of the four next larger counties, Marion, Allen, Vanderburgh and Madison, is 416,736. Vigo County's jail in the last eleven months received 1,634 persons on account of intoxication; the other four counties 3,102. In other words, Vigo County, containing the city of Terre Haute, has less than 1-6 the population of the counties containing the cities of Indianapolis, Fort Wayne, Evansville and Anderson, but had more than one-half as many persons in jail on account of intoxication. The proportion to population was one in every 38 in Vigo County and one in every 134 in the other four counties.

The following will be of interest as showing the number admitted to the jails and the one workhouse in the State annually for the past six years for vagrancy and intoxication:

	VAGRANCY.		INTOXICATION.	
	Total Number.	Cost of Board.	Total Number.	Cost of Board.
1902	4,101	\$4,389 17	11,364	\$27,302 67
1903	3,059	3,760 82	12,394	32,053 42
1904	4,115	5,025 21	12,774	31,702 87
1905	3,948	4,848 14	11,687	33,193 06
1906	3,379	4,109 61	13,210	36,609 68
1907	2,007	3,517 15	14,361	42,946 03

The Appellate Court, in a case brought to its attention, has ruled that sheriffs are not entitled to the in and out fees of prisoners. It is said the sheriffs will contest this decision.

It is hard to get the people of a county where jail conditions are bad to believe a plain statement of the facts, and harder to get them to comprehend what these facts mean. If one were to describe as plainly as he could the conditions to be found in some of our county jails, the public would not believe them. It took years to awaken the good people of Miami and Knox counties to the terrible realities of their old jails, but eventually the public conscience was stirred and creditable buildings were erected.

Who believes the good citizens of Lake County would allow the

herding together of human beings in the jail at Crown Point if they knew the facts? Who thinks that the people of Madison County would approve the scant quarters and bad conditions in their jail if they understood how things are? Who can conceive that the citizens of Floyd County would permit communication between sexes and the terrible immorality so long practiced in the jail at New Albany if they comprehended the conditions and their results in that community?

Yet these things exist in those counties, and similar conditions are found in others. What are our people doing about it? The jails at Terre Haute, Princeton, Jeffersonville, Indianapolis and Crown Point are greatly overcrowded. On the occasion of a visit to the jail at Terre Haute last April, the Secretary of this Board found present ninety-three prisoners (89 men and 4 women), though the normal capacity of the jail is but thirty-five. The jails at Sullivan, Connersville and Lebanon are badly out of repair. A year ago we called attention in our report to the unsafe condition of the Fayette County jail, in which prisoners had committed serious damage and destroyed the locking arrangements. Later, following another visit, a special report was made to the Board of County Commissioners, detailing the weak and unsafe conditions of this jail. It remained, however, for the killing of a prisoner therein by another violent prisoner, supposed by some to be insane, to demonstrate the truth of the report.

The unsanitary and generally bad condition of the jails at Greencastle, Vernon, Shelbyville, Greensburg and Hartford City are distressing. Some of the buildings are so old and so poorly adapted to the purpose that little can be done to improve them. We can only wait until the counties are ready to build new ones. The jail at Shelbyville lacks needed repairs. It was recently found so uncleanly and unsanitary that it was noteworthy in that respect of all jails visited the past year.

Complaints have been made of the lack of care of the women prisoners in the jails at Vincennes, Lafayette and New Albany. The stories that are told regarding the disgraceful conduct in the Tippecanoe County jail and the statements made upon good authority regarding the terrible immoralities practiced in the Floyd County jail are enough to shame every citizen of our State.

There has been an awakening in some counties at least and some of the bad jails are to be replaced with new ones. A fire last winter destroyed the Warren County Court House at Williamsport and with it the old jail in the basement. The commissioners have re-

placed this with a small modern jail sufficient for the needs of the county. An appropriation of \$70,000 has been made for a new jail in Laporte County and one of \$125,000 to rebuild the old jail in Vigo County. Appropriations have also been made for a similar purpose in the counties of Gibson and Greene. There is talk of needed new jails in Delaware, Madison and Lake Counties. In Marion County jail facilities will be ample for several years if all sentenced women are sent to the new correctional department of the Woman's Prison, if the wing of the county workhouse now used for them is given to the men, and if the third floor of the jail is fitted up with cells, as it was intended to be.

More and more the injustice and inhumanity of keeping prisoners in our local jails without employment is impressing itself upon our people. During the sessions of the last legislature there was much inquiry regarding the possibility of some enactment by which such prisoners could be employed. From one locality after another came statements of a desire to assist in securing the beginning of a state workhouse system and this increased as the legislature discussed conditions in various institutions. This desire for employment of prisoners is spreading more rapidly throughout the State than one would suppose. The commissioners in Johnson and Grant counties have recently adopted orders looking to the employment of their prisoners. By invitation of the local authorities a representative of this Board visited Terre Haute and discussed with the city and county boards the question of the employment of prisoners and the erection of a workhouse. In St. Joseph County the matter is also a vital one and the commissioners of that county as well as of Elkhart County have discussed the desirability of joint action. There is strong sentiment in favor of the employment of prisoners in Vanderburgh County. This is being supported by the Board of County Charities.

TABLE No. 1.

JAIL CENSUS, SEPTEMBER 30, 1907.

COUNTIES.	TOTAL POPULATION.			PRISONERS.												INSANE.		TRAMPS, LODGERS.	
	Male.	Female.	Total.	Awaiting Trial.				Serving Jail Sentences.				Miscellaneous.							
				Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.				
Adams.....	2		2	1				1											
Allen.....	41		41	17				24											
Bartholomew.....	9		9	5				3										1	
Benton.....																			
Blackford.....	12		12	5				7											
Boone.....	1		1					1											
Brown.....																			
Carroll.....	3		3										2					1	
Cass.....	10		10	7		1		2											
Clark.....	10	3	13	1	2			7	1									2	
Clay.....	13	1	14	8	1	1		4											
Clinton.....	3		3	1				2											
Crawford.....																			
Davies.....	2		2					2											
Dearborn.....	6		6	2				4											
Decatur.....	11		11	2				3					4					2	
Dekalb.....	5		5	2		2		1											
Delaware.....	52	4	56	13	2	4		35	2									1	
Dubois.....	5	2	7	2				2	1		1								
Elkhart.....	9		9	4				4					1						

TABLE No. 1—Continued.

COUNTIES.	TOTAL POPULATION.			PRISONERS												INSANE.		TRAMPS, LODGERS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Tipton.....	4	4	1</

TABLE No. 2.

TOTAL NUMBER OF INMATES ADMITTED DURING 11 MONTHS ENDING SEPTEMBER 30, 1907.

COUNTIES.	SERVED SENTENCE OR LAID OUT FINES.				INSANE.				MISCELLANEOUS.				TRAMPS.			TOTAL.	
	Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.	Male.	Female.	Total.	Male.	Female.
Adams.....	41	1	1		7				64					1	1	113	2
Allen.....	508	35	2		14	5			221	15	23	8	49		49	768	63
Bartholomew.....	130	8	12	4	2	2			2							193	12
Benton.....	12		2		3											17	
Blackford.....	85				8				96	5	1					190	5
Boone.....	264	6	3	2	3				4				52		52	326	8
Brown.....	1		2		2				2	1	1					8	1
Carroll.....	120		2		1								71		71	194	
Cass.....	152	5	11		6	2			393	25		3	118	2	120	680	37
Clark.....	159	15	3	4	5	2							185	8	193	332	29
Clay.....	234	15	3	6	3	3			34							271	24
Clinton.....	143	1			2	1			245	25						390	27
Crawford.....	3																
Daviess.....	61	5			3	1			12							15	1
Dearborn.....	170	3	2	1	7	2	1		105	14	1		54	7	61	225	27
Decatur.....	15	1			1				7	4	15	1	31	1	32	182	5
DeKalb.....	33	1			3				200							269	9
Delaware.....	939	23	20	5	3	2			9	4			1		1	50	1
Dubuois.....	47	3	1	1	6	6			225	75	45	15	18		18	1,253	120
Elkhart.....	45				3	2			154	10	16	2			3	60	6
Fayette.....	84	6			2	1										218	14
Floyd.....	278	44	10	3	4	3			65	1	4		7	1	8	162	9
Fountain.....	68	2			2				26	6	2					321	56
Franklin.....	162	1		2	4				43		5		7		7	192	2
									4				27		27	202	3

TABLE No. 2—Continued.

COUNTIES.	SERVED SENTENCE OR LAID OUT FINES.				INSANE.				MISCELLANEOUS.				TRAMPS.		TOTAL.	
	Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.	Men.	Women.	Boys.	Girls.	Male.	Female.	Total.	Total.
Fulton.....	18	9	7	2	1				165	5	3	1	2		184	189
Gibson.....	173	9			6				23	4					214	230
Grant.....	318	40	1	1	13	9			508	46	24	6	1	1	864	967
Greene.....	41	2	2	1	5	4			53						101	108
Hamilton.....	70	4			5			1	60	2	5	1	10		150	157
Hancock.....	60	2	9	1	18	3							122		209	215
Harrison.....	20								5				60		25	25
Hendricks.....	36	1	1		1								98		99	99
Henry.....	134	3							82						216	219
Howard.....	151	9	20		13										184	193
Huntington.....	41		1		3				30	1	5				80	81
Jackson.....	113	6			9				9	1					122	129
Jasper.....	5				1				9				20	2	35	37
Jay.....	45				5	6			50	3	3		2		105	114
Jefferson.....	57	8			6	1			110	9			20		193	211
Jennings.....	19	1			3				10				1		33	34
Johnson.....	155	3			4								32		197	202
Knox.....	310	58	6	2	11			2	74				34		450	511
Kosciusko.....	31		21	1					163	1		2			194	197
Lagrange.....	4				2				7		1		20		34	34
Lake.....	349	2			19	2			26				18		422	426
Laporte.....	337	2			18	3			48	6	4		32		439	450
Lawrence.....	200	13			4	3			234	3	4	3	8		450	472
Madison.....	356	15	4		14	5			473	28	38	2	57		922	972

[illegible]

TABLE No. 2—Continued.

COUNTIES.	SERVED SENTENCE OR LAID OUT FINES.				INSANE.			MISCELLANEOUS.			TRAMPS.			TOTAL.	
	Men	Women	Boys	Girls	Men	Women	Boys	Girls	Men	Women	Boys	Girls	Male	Female	Total
Vigo.....	1,149	107	2	1	21	11	.....	.....	1,698	460	.....	.....	150	.....	150
Wabash.....	148	2	.....	.....	4	.....	.....	.....	105	2	11	.....	268	4	272
Warren.....	3	.....	1	2	2	3	.....	.....	8	.....	.....	.....	17	5	22
Warrick.....	25	.....	.....	.....	1	.....	.....	.....	49	1	2	1	.....	2	79
Washington.....	19	.....	.....	.....	4	.....	.....	.....	18	.....	1	.....	16	58	1
Wayne.....	220	13	.....	4	11	7	1	4	40	.....	.....	.....	272	24	296
Wells.....	167	2	4	.....	3	.....	.....	.....	.....	.....	.....	.....	148	4	152
White.....	11	.....	.....	.....	9	.....	.....	.....	13	1	.....	.....	322	6	328
Whitley.....	15	.....	.....	.....	3	1	.....	.....	8	.....	.....	.....	33	1	34
Total.....	18,916	1,668	466	97	470	125	8	6	8,428	868	362	75	1,972	29	2,001
													30,622	2,868	33,490

*Newton County prisoners are kept in the Jasper County jail. During the year there were present from Newton County 4 men serving sentence, 1 insane man, and 4 insane women.

**Includes 10 U. S. prisoners.

TABLE No. 3.

VAGRANCY AND INTOXICATION FOR 11 MONTHS ENDING SEPTEMBER 30, 1907.

COUNTIES.	VAGRANCY.				INTOXICATION.				TOTAL AD-MISSIONS FOR VAGRANCY AND INTOXICATION.	TOTAL COST OF BOARD.
	Number.			Cost of Board.	Number.			Cost of Board.		
	Male.	Female.	Total.		Male.	Female.	Total.			
Adams.....	12	.....	12	\$17 20	74	.....	74	\$192 00	86	\$209 20
Allen.....	97	.....	97	626 00	333	15	348	1,931 79½	445	2,557 79½
Bartholomew.....	7	.....	7	7 20	155	4	159	382 60	166	389 80
Benton.....	.....	.....	.....	.....	2	.....	2	2 00	2	2 00
Blackford.....	.....	.....	.....	.....	118	3	121	330 40	121	330 40
Boone.....	37	.....	37	36 00	193	.....	193	536 00	230	572 00
Brown.....	.....	.....	.....	.....	43	.....	43	105 60	115	154 66½
Carroll.....	72	.....	72	49 06½	.....	.....	.....	.....	.....	.....
Cass.....	92	.....	92	62 13½	324	13	337	573 04½	429	635 18
Clark.....	6	.....	6	27 40	196	12	208	713 00	214	740 40
Clay.....	1	.....	1	80	198	4	202	940 80	203	941 60
Clinton.....	.....	.....	.....	.....	295	8	303	980 00	303	980 00
Crawford.....	.....	.....	.....	.....	8	.....	8	8 40	8	8 40
Davies.....	21	.....	21	63 60	161	8	169	248 80	190	312 40
Dearborn.....	4	.....	4	24 80	99	.....	99	382 40	103	407 20
Decatur.....	32	1	33	79 20	83	.....	83	157 60	116	236 80
DeKalb.....	.....	.....	.....	.....	25	.....	25	116 15	25	116 15
Delaware.....	26	.....	26	78 80	406	11	417	2,047 24	443	2,126 04
Dubois.....	2	1	3	14 40	23	1	24	50 80	27	65 20
Elkhart.....	51	1	52	42 60	99	1	100	192 40	152	235 00
Fayette.....	10	1	11	8 80	101	2	103	303 60	114	312 40
Floyd.....	1	.....	1	1 20	193	16	209	1,157 60	210	1,158 80
Fountain.....	16	.....	16	37 60	76	1	77	398 80	93	436 40
Franklin.....	.....	.....	.....	.....	2	.....	2	1 20	2	1 20

TABLE No. 3—Continued.

COUNTIES.	VAGRANCY.			INTOXICATION.			TOTAL AD- MISSIONS FOR VAGRANCY AND INTOXICA- TION.	TOTAL COST OF BOARD.
	Number.			Number.				
	Cost of Board.			Cost of Board.				
	Male.	Female.	Total.	Male.	Female.	Total.		
Fulton.....	30	1	31	122	1	123	154	\$158 40
Gibson.....	2		2	69	1	70	72	274 00
Grant.....	13	6	19	575	29	604	623	1,610 50
Greene.....	5		5	51	.....	51	56	153 80
Hamilton.....	6		6	62	.....	62	68	183 60
Hancock.....	65		65	106	1	107	172	246 40
Harrison.....	.....		.....	3	.....	3	3	6 00
Hendricks.....	.....		.....	60	.....	60	60	225 20
Henry.....	1		1	240	2	242	243	849 00
Howard.....	3		3	75	6	81	84	313 10½
Huntington.....	1		1	27	.....	27	28	112 00
Jackson.....	.....		.....	89	.....	89	89	476 60
Jasper.....	.....		.....	4	.....	4	4	7 60
Jay.....	.....		.....	37	.....	37	37	170 05
Jefferson.....	24	2	26	96	11	107	133	273 20
Jennings.....	1		1	18	1	19	20	90 55
Johnson.....	51		51	129	4	133	184	312 95
Knox.....	41		41	249	10	259	300	791 40
Kosciusko.....	36	1	37	90	.....	90	127	855 00
Lagrange.....	12		12	3	.....	3	15	104 95
Lake.....	54		54	246	.....	246	302	6 40
Laporte.....	29		29	230	2	232	260	1,262 80
Lawrence.....	13		13	343	1	344	360	1,219 60
Madison.....	67	1	68	405	4	409	380	803 80
					12	417	485	1,463 40

Marion.....	201	20	221	419 80	638	54	692	2,758 00	913	3,177 80
Marion County Work House	51		51		1,337	83	1,420		1,471	
Marshall.....	9		9	8 00	33	2	35	59 20		67 20
Martin.....					11		11	37 20	11	37 20
Miami.....	8		8	5 60	241	3	244	417 05	252	422 65
Monroe.....	59		59	48 00	172	2	174	407 60	233	455 60
Montgomery.....	184	2	186	168 80	260	13	273	708 10	459	876 90
Morgan.....	2		2	1 60	182		182	284 60	184	286 20
Newton*										
Noble.....					12		12	125 60	12	125 60
Ohio.....	2		2	40	12		12	9 64	14	10 04
Orange.....					5		5	18 40	5	18 40
Owen.....	16		16	13 20	32		32	38 80	48	52 00
Parke.....	33		33	26 50	34		34	57 60	67	84 10
Perry.....	2		2	1 60	41		41	85 80	43	87 40
Pike.....					26		26	30 95	26	30 95
Porter.....	23		23	24 00	38		38	81 20	61	105 20
Posey.....	25		25	32 80	99	1	100	280 80	125	313 60
Pulaski.....					1		1	80	1	80
Punam.....	22		22	61 60	369	3	372	727 80	394	789 40
Randolph.....	3		3	1 20	58		58	214 57	61	215 77
Ripley.....					72		72	128 00	74	148 80
Rush.....	2		2	20 80	21		21	30 40	21	30 40
Scott.....										
Shelby.....	23	1	24	17 75	154	1	155	329 88½	179	347 63½
Spencer.....					20	4	24	78 80	24	78 80
Starke.....					8		8	43 60	8	43 60
Steuben.....	10		10	10 40	38		38	77 60	48	88 00
St. Joseph.....	46		46	156 00	526	11	537	1,874 60	583	2,030 60
Sullivan.....	76	1	77	64 00	224	1	225	369 15	302	433 15
Switzerland.....					6		6	17 80	6	17 80
Tippecanoe.....	42		42	244 40	244	14	258	1,076 60	300	1,321 00
Tipton.....	1		1	80	122		123	286 40	124	287 20
Union.....	17		17	10 00	12		12	18 00	29	28 00
Vanderburgh.....					195	30	225	904 00	225	904 00
Vermillion.....	2	1	3	4 00	67	1	68	345 60	71	349 60
Vigo.....	146	1	147	283 10	1,521	113	1,634	6,235 95½	1,781	6,519 05½
Wabash.....	1		1	1 20	203	3	206	590 40	207	591 60
Warren.....					9		9	35 40	9	35 40

*Newton County prisoners are kept in Jasper County jail.

TABLE No. 3—Continued.

COUNTIES.	VAGRANCY.			INTOXICATION.			TOTAL AD- MISSIONS FOR VAGRANCY AND INTOXICA- TION.	TOTAL COST OF BOARD.
	Number.			Cost of Board.				
	Number.			Cost of Board.				
	Male.	Female.	Total.	Male.	Female.	Total.		
Warwick.....	14	.....	14	49	.....	49	49	\$99 60
Washington.....	2	.....	2	26	.....	26	40	55 20
Wayne.....	.....	.....	.....	162	1	163	164	1,089 40
Wells.....	2	.....	2	11	.....	11	11	74 00
White.....	1	.....	1	11	.....	11	13	22 40
Whitley.....	.....	.....	.....	5	.....	5	6	14 60
Total.....	1,966	41	2,007	13,843	525	14,368	16,375	\$46,463 18½

DEPENDENT CHILDREN.

Under our system of child-saving there is a combination of local and State effort in the work of caring for children who are public wards and finding permanent homes for them. An orphanage can be used as a receiving home by one county or by several counties. There the children will be made ready to go out into a family. Effort is made to fit the family and the child to each other.

Under the 1897 law the State agents are bound to offer their services in such manner as to distribute them equitably among the different counties of the State. While most of them have been glad to avail themselves of the agents' help, a few have made little if any use of them. Under the law of 1907, however, all children declared public wards by the juvenile court are available for placement by the agents of the Board of State Charities. The theory of the work for children is that every placeable child shall be placed in a suitable family home as promptly as possible. This is required of all orphans' homes as well as of the agents of the Board of State Charities.

The new law referred to has made other important changes in the method of dealing with dependent children. Heretofore such children have usually been made public wards by the township trustee placing them in an orphans' home or the county poor asylum. The township trustee is, ex officio, the overseer of the poor. It is still his duty to look after dependent children, but under the new law he must bring their cases to the attention of the judge of the juvenile court, who will direct what shall be done. It is merely a different method of procedure. Others also may, without personal expense, bring the case of any child that is destitute or is neglected to the attention of the judge of the juvenile court. The case may be heard either during the regular term of the court or in vacation, and if a judge is absent on official business in another county he may appoint a judge pro tem. for the hearing of children's cases. There should not be any special delay, but in case there is, the township trustee, as overseer of the poor, can give such temporary assistance or make such temporary provision as seems best to him until the case is disposed of by the court. This has been the practice in other states for years, and many persons be-

lieve that the larger proportion of minor public wards in Indiana is due to the ease with which relatives have escaped their natural responsibilities by placing the children in orphans' homes.

Under this law children are made public wards only by order of the juvenile court. No other children, except such as were public wards when the law became effective, can be legally supported by a county. It is the impression of a few persons that this law is responsible for cutting off the payment from public funds for the support of private wards. Such is not the case. That was done by the law of 1897, and all the orphans' homes in the State, with possibly one exception, complied with its provisions. This law simply re-enacts that feature of the child-saving law of 1897, in different words. There are, however, some new and important provisions. The judicial decree making the child a public ward means that a thorough investigation has been made to see whether something else could not be done for the child's maintenance; that a complete record of its individual and family history has been obtained; that the child has been placed under public guardianship and the responsibility for its care and oversight has been fixed; that irresponsible and undesirable relatives are prevented from interfering with it. All of these important features are in the main lacking under the old system of caring for children and the results of the new law promise to be very valuable. Of course we cannot speak from the records as yet, but the general indications are that parents or guardians who can do so will hereafter be required to care for their own natural responsibilities; that they will not be permitted, every time there is a family quarrel, or a desire to dispose of their children, to take them to the door of the orphans' home and turn them in. Under this law there is also provision for the court dealing with the adult who contributes to the child's dependence or neglect.

Two cases recently came before the Marion County Juvenile Court which illustrate the value of this new law. In one a child was taken before the court by its aunt, who was no longer able to maintain it. Through investigation it was found that a brother was able and willing to care for the child and it was given to him. The other case was that of two young parents who wanted to place their child in an orphans' home because its crying at night disturbed them. Such cases as these would have become public wards under the old system. Under the new system they will be placed under the supervision of the probation officers without becoming public charges. The natural result of these investigations will be a decrease in the number of children admitted to the orphans' homes.

On the other hand, the board of children's guardians law provides for the removal of any child from an unfit or immoral home. The fact that the children are available for placement will result in more of them being transferred to family homes.

A number of judges have informed themselves of the special work each children's institution in the State is best fitted to do. They are therefore able to send a child to the place where it can receive the special treatment or training it needs.

The reports from orphans' homes show that on September 30, they had a population of 1,582. This is 165 less than on the last day of the preceding year. The records show further that 535 children were admitted to the orphans' homes from April 1st to September 30, 1906, while in the corresponding period of this year the total admissions numbered 440, or 95 less.

An amendment was made to the dependent children act of 1897 giving county commissioners the authority to pay to orphans' homes or associations not to exceed thirty-five cents a day each for caring for and securing homes for the children committed to them.

Another act of the last legislature provides that every child in an orphans' home or other custodial institution is to be educated at the expense of the school corporation where it has a legal settlement. The township trustee, the board of county commissioners, the judge of the juvenile court and other officers are charged with the duty of reporting promptly the school corporation to which any such child belongs, and the township trustee or school board where it has a legal settlement is required to issue a transfer certificate to the proper school authority where the orphans' home or other institution is located.

Attention is directed to the report of the State Agency, which follows. This will be found to contain full statistical information concerning the work not only of the State agents, but of the various orphans' homes which receive public wards.

All the laws relating to dependent, neglected and delinquent children have been published in pamphlet form. They can be obtained by addressing the Board of State Charities.

REPORT OF THE STATE AGENCY.

Amos W. Butler, Secretary :

The State Agency has employed its energies, since the last report, along the usual lines and has accomplished the usual amount of work, comparatively, as the statistical tables appended to this report will show. I say comparatively, because the fiscal period just closed is for eleven months as against twelve months of former periods.

It does not seem necessary here to make special explanation of the different phases of work which have been the object of this department's efforts, as this has been done in former reports.

There have been some changes, as usual, in equipment and management of the various orphans' homes in Indiana during the past year, most conspicuous among which was the opening and dedication in May of a new three-story brick building, the home of the Northern Indiana Children's Aid Society, at Mishawaka. The Delaware County Association has moved into its new home on a farm west of Muncie. While the new institution is in some ways an improvement over the one formerly occupied, there are serious defects in the workmanship and in the system of drainage. The Association in Cass County, which lost its home by fire more than a year ago, has built another and the children were moved into it January 5, 1907. The Indiana Children's Home Society has a new school house at its receiving house in Westfield; the German Baptist Orphans' Home at Mexico, Miami County, has a new school room, with a dormitory on the second floor; improvements of more or less importance have been made in the homes at Shelbyville, Plymouth and other places. The Crawford Baptist Industrial Home at Zionsville, Boone County, a private institution which was opened in August, 1906, is adding a new building to its equipment. This is a cottage of eight rooms, to be occupied by boys. It will increase the capacity of the institution to seventy-five. Some of the homes have new superintendents. Mrs. Julia A. Toomey succeeds Mrs. Cora Seera, at Jeffersonville; Mrs. Florence Spickard succeeds Mrs. Laura Simpson, at New Albany. Miss Abbie Bond, who for some time was matron of the Indianapolis Home for Friendless Colored Children, resigned to get married. Her position has not yet been

filled. Mrs. Laura E. Mastin has been succeeded as matron of the Montgomery County Orphans' Home by Mrs. O. W. McDaniel, who has previously served the home in that capacity. John U. Harkness has retired from the superintendency of White's Manual Labor Institute, at Wabash. He was succeeded by James Moorman, formerly of Winchester.

The matter of most significance to the work of this department during the year was the law passed by the General Assembly of 1907, defining a dependent child and a neglected child, and setting forth the conditions under which such children could become public wards. The need of some such measure was so great, its purpose so apparent, that it is to be regretted that its provisions are not fully understood and that its enforcement has led to confusion.

There are, however, only two measures in this law that are not already either expressed or implied in the board of children's guardians law, as amended in 1901, or the juvenile court law approved March 10, 1903. These are: limiting the support by public funds to such children as pass through the juvenile court and making it a misdemeanor for a parent, guardian or other person to contribute to the neglect or dependency of a child. These are wise enactments.

A serious omission in this law is that of an express procedure to carry its provisions into effect. As it is, each juvenile court judge in the State may have a different court proceeding in the cases of neglected and dependent children brought before him. This is unfortunate, as uniform methods would be of distinct advantage.

TABLES.

The tables which follow are based on the monthly reports of the orphans' homes and the weekly reports of the agents.

Table I, showing the work of the agents for the eleven months ending September 30, 1907. The four agents have spent a total of $845\frac{3}{4}$ days in the field during the year, visiting children, investigating applications, placing children in homes, inspecting orphan asylums and conferring with public officials. Fifteen hundred and fifteen children were visited, and of these, 1,193, or 79 per cent., were found doing well; the condition and surroundings of 203, or 13 per cent., were less satisfactory, yet not of such a nature as to warrant removal of the children; the remaining 119, or 8 per cent., were found doing poorly, and proper action was taken in each case looking to the return of the child to the placing agency. One hun-

dred and seventy-three other visits were made to addresses given, without finding the children reported. One hundred and ninety-six children were placed in homes during the eleven months, 160 being children who had not previously been placed by the agents, and 36 being transfers. Twenty-four children were returned to counties. The applications investigated numbered 353, and all but 79 of these were approved. The visits to the various orphan asylums numbered 210; to county poor asylums, 11; to boards of county commissioners, 9. Special items of work not coming under any of the classifications given numbered 373. These included investigations into complaints, reports of alleged mistreatment, visits to citizens and officials interested in the work, etc.

The above constitutes the field work of the department, and its cost, including the salaries of the agents while engaged therein, amounted to \$5,462.54. The balance of the legislative appropriation for the department, amounting to \$1,842.23, shows the cost of the office work, stationery, postage, etc. The traveling expenses of children placed by the agents, paid by the counties, amounted to \$208.32, making the total cost of the agency field work \$5,670.86.

Table II, showing the placement of children in family homes by the State Agency since the department was created April 1, 1897. In addition to visiting children in family homes, and in a general way supervising the work of the orphans' home associations, the agency has found time, in the ten and one-half years of its existence, to place 1,674 children, and it is gratifying to know that 1,286, or 76 per cent. of them have remained off public support. The results achieved are seen in the following statement:

Total number of children received	1,674
In family homes:	
Subject to visitation	686
Adopted	30
Over age	137
Over age and self-supporting	136
Ran away	141
Married	39
Died	25
With parents	80
In other institutions	12
	<hr/>
	1,286
Returned to counties	388
	<hr/>

In this table will be found also the figures indicating the number of children supported by each county on September 30, 1907. The significant thing in connection with these figures, as has been pointed out in previous reports, is that those counties which have orphans' homes within their borders have the greatest number of dependent children.

Table III shows the movement of children in the orphans' homes supported in whole or in part at public expense. At the beginning of the year there were 1,749 public wards in the different orphans' homes in the State. In the eleven months just closed 880 children not previously on public support have been received, and 309 former wards have been readmitted, making a total of 2,938 children handled during the year. These are to be accounted for as follows:

In family homes:

Placed by the State agents	125	
Placed by the associations	560	
	<hr/>	685

Returned to parents:

By the State agents	3	
By the associations	389	
	<hr/>	392

Transferred to other institutions	134
In family homes, adopted	23
Over age and self-supporting	41
Ran away or kidnapped	24
Died	57
	<hr/>

	1,356
In orphans' homes, September 30, 1907.....	1,582
	<hr/>
	2,938

Table IV shows the work of the orphans' home associations during the past five years and the children in family homes subject to visitation. In this table there has been considered the activity of the different associations in the matter of placing children in family homes. The number of children restored to parents is also given. It will be found that some of the associations have been quite active and that others did very little, while some have returned more children to parents than were placed in family homes. Among the homes which did little or no placing will be found those which make a specialty of caring for defectives and non-placeable children. Taking into consideration the whole number of children handled by the different orphans' homes during the year, as shown by Table

III, it is found that the associations placed but 25 per cent. of their children in homes. Not all so placed remained off public support, it having been found necessary in some cases to return the children to the asylum. Three hundred and ninety-six children were restored to parents during the year. This is equal to 14 per cent. of the whole number in orphans' homes in the twelve months.

The second part of Table IV indicates the number of children in family homes, subject to visitation, without reference to the time they were placed. Of the 2,978 children in homes, 2,172 were placed by the orphans' home associations, 686 by the State agents and 120 by other agencies.

Table V, showing the population of the forty-one orphans' homes supported in whole or in part by public funds, also the children boarded in private families or institutions, by the Blackford and Tippecanoe County Boards of Children's Guardians. On September 30, 1907, there were 1,005 boys and 577 girls on public support in the different counties, a decrease of 165 from the number of public wards on the same day one year ago. Some of the homes will be found to have a small number of children, such as Boone with 4, Clay with 15, Franklin with 8, Johnson with 15, Lagrange with 5 and Warrick with 7. On the other hand the Allen County Home has 57 children, that in Grant County 76, the Indianapolis Home for Friendless Colored Children 58, the German Protestant Orphans' Home in Indianapolis 47, the Julia E. Work Training School in Marshall County 223, the German Baptist Orphans' Home at Mexico 82, the Vigo County Board of Children's Guardians 77, White's Manual Labor Institute at Wabash 161. This table indicates, also, that only 105, or 7 per cent., of the children in orphans' homes are reported as full orphans, while 595, or 37 per cent., are reported as having one parent living, and in the case of 882, or 56 per cent., it is assumed in the absence of any information to the contrary, that both parents are living. The exact facts would probably modify these figures to a certain extent, though it is well known that the orphans' home population would be decidedly less were it not that too many parents shift to the public the responsibilities they should themselves bear.

The age of children in the orphans' homes is also given in this table. There were 159 under five years of age, 578 from five to ten years, and 845 ten years and over.

Table VI shows the number of children in county poor asylums on September 30, 1907. Under the law, children between the ages of three and seventeen years may not remain in the county poor

asylums longer than sixty days. Of the ninety-two asylums in the State, only twenty-four had inmates under seventeen years of age on the last day of the fiscal year. Seventeen of these were babies with their mothers, and of the remaining fifteen, five were epileptic, feeble-minded or insane, one was sick or crippled, and nine were able-bodied and bright. Those who remember that twelve or fifteen years ago there were between two hundred and three hundred children to be found at all times in these institutions, will be gratified by this report.

The average length of time the children now on public support have spent in the different orphans' homes is found this year to be thirty-one months. This is an increase of five months over the record for 1906.

With expressions of gratitude to you, to the agents who have so faithfully toiled with me, and through you to the Board, I am,

Respectfully,

P. N. HISER. State Agent.

[illegible]

TABLE No. 1—Continued.

COUNTIES.	CHILDREN VISITED.				Children Not Found.	Children Returned to Counties.	CHILDREN PLACED IN HOMES.			Applications Investigated.	Applications Rejected.	Visits to Orphans' Homes.	Visits to Poor Asylums.	Visits to County Commissioners.	Specials.	Days Required.	Total Cost to State Including Salaries.	Total Cost to Counties.
	CHILDREN VISITED.						New Children Received.	Children Transferred.	Number Placed.									
	Total.	Doing Well.	Doing Fairly Well.	Doing Poorly.														
Parke.....	10	7	2	1	1	1	2	8	1	1	..	1	..	2	4	\$26 02	\$1 15	
Perry.....	41	39	2	..	..	..	..	..	7	..	..	..	..	8	15 ¹	119 03	..
Pike.....	14	11	3	..	..	..	..	..	2	..	3	..	..	3	8 ¹	75 47	..
Porter.....	36	26	6	4	1	..	2	10	16	8	..	..	..	4	23	142 62	30
Posey.....	14	14	..	..	..	1	2	..	..	..	..	..	..	1	3	20 10	3 85
Pulaski.....	14	10	4	..	3	..	..	..	2	..	..	..	..	2	4	24 22	..
Putnam.....	24	18	4	2	4	1	..	..	1	..	3	..	..	3	8	45 63	..
Randolph.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ripley.....	15	15	..	..	..	1	1	..	3	1	..	..	..	1	6	43 61	1 70
Rush.....	13	11	2	..	1	1	..	..	8	1	..	..	1	3	5	33 21	4 17
Scott.....	15	13	2	..	..	5	..	6	2	..	5	..	..	6	17	139 17	..
Shelby.....	16	14	..	2	5	..	1	1	..	..	..	..	..	4	11	59 14	8 00
Spencer.....	..	..	..	..	..	3	..	..	1	..	2	..	..	7	1	6 35	2 13
Starke.....	4	2	1	1	1	..	..	..	1	1	..	..	..	1	3 ¹	26 36	..
Steuben.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
St. Joseph.....	56	39	9	8	9	..	..	..	6	1	2	..	..	3	14 ¹	86 25	..
Sullivan.....	18	16	2	..	..	2	..	..	..	..	..	..	..	1	5 ¹	37 70	..
Switzerland.....	3	3	..	..	..	2	..	..	..	..	..	..	..	..	1	7 38	60
Tippecanoe.....	..	..	..	..	..	2	..	..	..	..	1	..	..	10	5	23 44	31
Tipton.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Union.....	3	3	..	..	..	6	..	..	3	2	..	..	..	..	2 ¹	15 10	..
Vanderburgh.....	4	4	..	..	1	1	1	3	2	1	10	..	..	10	8 ¹	53 07	9 44
Vermillion.....	9	4	3	2	1	1	..	..	..	..	..	..	..	1	4	23 31	2 78
Vigo.....	1	1	..	2	..	5	1	1	3	1	3	..	..	13	7 ¹	50 29	3 49

Wabash.....	2	2	1	10	3	12	3	18	7	21½	117 43	3 68						
Warren.....				1	1	1	1	3	4	2½	18 75	2 30						
Warrick.....																		
Washington.....	14	14		4	2	5			2	8½	63 98	3 60						
Wayne.....	4	2		5	1	8	4	1	1	5½	28 05	2 75						
Wells.....				2					1	½	4 17	1 40						
White.....						1				1	5 36							
Whitley.....																		
Outside of State.....	1					1				1	6 61							
Total.....	1,515	1,193	203	119	173	24	160	36	196	353	79	210	11	9	373	845½	\$5,462 54	\$208 32

TABLE No. 2.

WORK OF THE STATE AGENCY, FROM APRIL 1, 1897, TO SEPTEMBER 30, 1907.

COUNTIES.	NUMBER OF CHILDREN RECEIVED.								OFF PUBLIC SUPPORT.								Children Supported by Coun- ties, in the Different Orphan Homes, September 30, 1907.				
	Placed Once.	Placed Two Times.	Placed Three Times.	Placed Four Times.	Placed Five Times.	Placed Six Times.	Placed Seven Times.	Placed Eight Times.	Placed Eleven Times.	Total Received.	In Family Homes.			Died.	With Parents.	Married.		Over Age or Self Sup- porting.	Ran Away.	Other Institutions.	Returned to County.
											Subject to Visita- tion.	Adopted.	Over Age.								
Adams.....	16	1	1							18	3	2	3	2			2	1		5	57
Allen.....	31	12	9							52	24		4		4		9	2	1	8	42
Bartholomew.....																					
Benton.....																					
Blackford.....	1									1	1		1								8
Boone.....	2									2	1		1								4
Brown.....	1	1								2	2										
Carroll.....	1									1			1								3
Cass.....	16	2	1							19	5	1	1					1		12	17
Clark.....	30	12								42	15	1	5	7	2	1	5	3	1	5	24
Clay.....	7	4	2	3	1					17	2	4	4	1	1	1	2			5	15
Clinton.....	5	1								6	3			1		1					9
Crawford.....																					
Davies.....	15	7	6	3	1					32	15	4	4	2	2	1	2	5		3	39
Dearborn.....																					
Decatur.....	24	6	2	1						33	12	1	2	3	3	1	4	4		6	9
DeKalb.....	1																				2
Delaware.....	42	11	7	3		1				64	1	1	5		5	2	4	5		19	33
Dubois.....	3	1	1							5	24		7	1	1	1	1			1	7
Elkhart.....	4	1		1	1					6	1			1			1	1		4	23

[illegible]

Union.....	54	16	6	1	1	1	1	83	1	34	2	9	1	7	2	6	8	1	14	80
Vanderburgh.....	3	1						4	1	4									21	
Vermillion.....	37	19	6	1				63		11	1	3		2	5	2	8		30	71
Vigo.....																				
Wabash.....	32	17	3	2				54		32	1	3		2	1		2		11	22
Warren.....	3							3		1				1					1	3
Warrick.....	22	7	3	1				33		9	3	7		2	2	2	3	1	4	10
Washington.....								10		8				1		1				7
Wayne.....	5	3	1	1				51		23	1			1	1	7	6	1	11	26
Wells.....	6	2	5	4	2	1	2	8		3						2	2		3	31
White.....																				
Whitley.....	9	1						10		3	1						1		5	2
Other Agencies.....	5							6		1		2			1			1	1	12
Total.....	1,083	342	149	60	21	8	6	4	1	1,674	30	137	25	80	39	136	141	12	388	1,582

Henry and Rush.....	45	5	3	6	6	6	1	1	1	40
Jefferson.....	11	2	4	1	1	1	1	1	1	13
Johnson.....	10	8	2	3	3	2	3	3	3	15
Johnson—Board of Guardians.....		1		1						
Knox.....	34	48	11	2	20	33	2	1		35
Lagrange.....	5	2	3		2	3				5
Laporte—Board of Guardians.....		2				2				
Lawrence—Board of Guardians.....		6			2	3	1			
Madison.....	28	17	11	9	13	4	4	2	1	23
Marion—Board of Guardians.....	47	45	28	38	12	10	7	8	2	39
Marion—Indianapolis Orphans' Asylum.....	116	110	31	10	61	116	4	1	3	51
Marion—Children's Home Society.....	49	58	40	80	4	4	2	1	1	57
Marion—German General Protestant.....	65	4	1		19	4	4	4		47
Marion—Home for Friendless Colored Children.....	62	40	15	8	9	5	7		22	58
Marshall—Work Training School.....	258	39	34	21	7	5	12	45	6	223
Miami—German Baptist.....	75	33	9	22	11	1	1		1	82
Montgomery.....	22	8	4	6	4	4	1			23
Montgomery—Board of Guardians.....	23	2	1	3	3	2				24
Pike.....	25	5	2	6	2	5		1	1	16
Randolph.....		25	2	1	9	5				
Shelby.....	31	1	2	2	2	5		1	1	23
Spencer.....	16	1	4	3	2	15		1	3	15
St. Joseph—Children's Aid Society.....	50	44	7	1	23	4	17	1		52
St. Joseph—Board of Guardians.....		4	16		16	2	1		1	
Sullivan—Board of Guardians.....	1	2		3	3					
Tippecanoe.....	31	24	10		7	7	27		3	21
Tippecanoe—Board of Guardians.....		4	11	2	8	8	1	1		1
Vanderburgh—White.....	25	20	1	8	8		1			28
Vanderburgh—Colored.....	17	5	3	1	2	3		1		18
Vanderburgh—Board of Guardians.....	31	32	12	2	27	5	1	6		33
Vigo—Board of Guardians.....	87	62	33	3	43	34	21	1	1	77
Wabash—White's Institute.....	170	58	29	33	3	17	2	25	9	161
Warrick.....	7	2	4		4				2	7
Wells.....	33	3	1	10	3	3		1		23
Other Agencies.....		2	2	4	4					
Total.....	1,749	880	413	125	560	3	389	104	23	1,582
Less transfers to other orphans' homes, counted more than once.....	1,749	880	309	125	560	3	389		24	1,582

Gibson—White.	13	11	14	21	9	1	9	9	8	38
Grant.	11	7	17	21	13	1	15	14	2	39
*Hamilton.										
Hamilton—Board of Guardians.			4		1		1	1		5
*Hendricks.	1									5
*Henry.	6	8								7
Henry and Rush.			4	11	6	1	8	7	7	14
*Howard.	15									7
*Huntington.										
Jefferson.	3	4	6	10	1	1	3	2		5
Johnson.	12	4	11	8	3	1	5	4	2	15
Johnson—Board of Guardians.					1		1	1		30
Knox.	17	10	17	41	23	4	31	27	33	60
Lagrange.	5	6	12	10	2		2	2	3	15
Laporte—Board of Guardians.					1	1	3	2	2	
Laporte.			3	1	4		4	4	3	2
Lawrence—Board of Guardians.										
Madison.	27	26	46	26	13	3	22	17	5	56
Madison—Board of Guardians.			5							3
Madison—Board of Guardians.	66	85	64	74	55	9	79	66	13	152
Marion—Indianapolis Orphans' Asylum.	50	77	55	84	60	12	1	87	98	194
Marion—Children's Home Society.	116	137	148	127	83	12	114	97	4	348
Marion—German General Protestant.	2	4	4	1	1		1	1	19	3
Marion—Home for Friendless Colored Children.	3	9	11	12	10		10	10	9	27
Marshall—Work Training School.	42	11	21	13	11		11	11	9	63
Miami—German Baptist.	21	10	36	31	25	4	33	29	16	108
Montgomery.	17	5	16	24	7		9	9	8	35
Montgomery—Board of Guardians.					3		3	3	3	3
Pike.	14	9	8	4	6		6	6	2	19
*Putnam.	8		2	5						7
Randolph.	14	14	12	11	11		11	11	5	32
*Rush.										1
Shelby.	6	15	9	8	4		4	4	5	30
Spencer.	7	7	9	6	3		3	3		19
St. Joseph—Children's Aid Society.			33	38	27	1	29	28	4	110
St. Joseph—Board of Guardians.	38	42	1	1	18	2	22	20	2	16
Sullivan—Board of Guardians.					3		3	3		3

TABLE No. 4—Continued.

ORPHANS' HOMES.	WORK OF ORPHANS' HOME ASSOCIATIONS.										CHILDREN IN HOMES SUBJECT TO VISITATION .		
	Placements in Homes.												
	1907.												
	1903.	1904.	1905.	1906.	Once.	Twice.	Three Times.	Total No. of Placements.	Total Children Placed.	Restorations to Parents.	Placed by Associations.	Placed by State Agent.	Placed by Other Associa- tions.
Tippecanoe.....	10	6	10	23	11			11	11	6	24		
Tippecanoe—Board of Guardians.					3			3	3	8	2		
Tipton—Board of Guardians.		5	3								3		
Vanderburgh—White.....	19	8	7	7	10	1		12	11	8	35		
Vanderburgh—Colored.....	2		1	4	2			2	2	3	5		
Vanderburgh—Board of Guardians.	19	30	32	23	24	4	1	35	29	5	58		
Vigo—Board of Guardians.	59	49	50	52	46	11		68	57	36	112		
*Wabash.....	2										5		
Wabash—White's Institute.	5	6	4	5	6			6	6	19	13		
*Warren.....											3		
Warrick.....	12	4	4	7	3	1		5	4		24		
*Wayne.....											9		
Wayne—Board of Guardians.				2									
Wells.....	4	5	1	6	10			10	10	31	2		
State Agency.....											23		
Other Agencies.....				12									
Total.....	794	741	829	897	640	73	9	817	723	396	2,172	686	120

*Homes abandoned.

†Children's Home Society placed one child four times.

TABLE No. 5.

ORPHANS' HOMES.	NUMBER PRESENT.			Half Orphans.	Both Parents Living.	AGES.																Not Given.		
	Boys.	Girls.	Total.			Orphans.	1 Year.	2 Years.	3 Years.	4 Years.	5 Years.	6 Years.	7 Years.	8 Years.	9 Years.	10 Years.	11 Years.	12 years.	13 Years.	14 Years.	15 Years.		16 Years and Over.	
Allen.....	43	14	57	7	24	26	Under 1 Year.	1 Year.	2 Years.	3 Years.	4 Years.	5 Years.	6 Years.	7 Years.	8 Years.	9 Years.	10 Years.	11 Years.	12 years.	13 Years.	14 Years.	15 Years.	16 Years and Over.	
Bartholomew.....	19	18	37	1	15	21	.....	.....	3	1	3	1	4	1	5	4	6	2	4	3	6	.....	2
Blackford—Board of Guardians.....	5	2	7	1	4	2	.....	.....	1	1	1	.....	.....	1	1	2	1	1	1	.....	.....	1	.....
Boone.....	2	2	4	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cass.....	9	8	17	.....	7	10	1	1	.....	2	2	.....	.....	.....	2	2	2	3	2	2	1	.....	1
Clark.....	22	8	30	2	14	14	.....	.....	1	1	1	2	5	1	6	1	2	3	3	2	1	.....	3
Clay.....	11	4	15	4	7	4	.....	.....	1	1	1	2	2	2	2	2	4	1	1	1	2	1	.....
Davies.....	26	13	39	2	20	17	.....	.....	2	2	3	2	2	3	2	6	4	6	1	4	2	3	.....
Decatur.....	7	2	9	1	4	4	.....	.....	.....	.....	.....	1	1	1	1	2	2	1	1	1	.....	2	
Delaware.....	19	8	27	.....	10	17	2	2	.....	2	.....	1	1	6	1	7	2	1	1	.....	.....	.....	.....
Elkhart—Rest Cottage.....	3	.....	3	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Floyd.....	18	6	24	2	12	10	.....	.....	1	1	1	1	2	1	3	.....	5	4	2	2	1	.....	.....
Franklin.....	4	4	8	.....	5	3	.....	.....	1	1	1	.....	.....	.....	2	1	1	.....	.....	.....	1	.....	.....
Gibson.....	14	5	19	.....	12	7	.....	.....	1	1	.....	5	1	3	2	4	8	2	3	.....	.....	.....	1
Grant.....	45	31	76	10	26	40	1	2	2	1	5	5	3	3	7	8	8	8	7	8	5	3	3	
Henry and Rush.....	26	14	40	.....	27	13	.....	.....	1	1	1	3	4	3	4	2	6	6	5	1	3	.....	1
Jefferson.....	8	5	13	4	5	4	.....	.....	.....	.....	.....	.....	1	1	3	2	1	1	.....	2	1	.....	1
Johnson.....	7	8	15	.....	3	12	1	.....	.....	.....	.....	3	1	1	3	1	2	1	.....	2	1	.....	.....
Knox.....	21	14	35	2	18	15	.....	.....	1	1	1	4	2	2	4	4	3	1	1	5	2	.....	1
Lagrange.....	3	2	5	1	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	1	.....	1	.....	.....	.....
Madison.....	11	12	23	1	11	11	.....	.....	.....	1	1	1	1	1	4	1	4	1	1	.....	2	1	1
Marion—Board of Guardians.....	29	10	39	.....	14	25	.....	.....	1	1	.....	2	4	6	6	11	3	8	2	1	3	.....	3
Marion—Children's Home Society.....	38	19	57	6	13	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	8	8	7	2	3	.....	2
Marion—Indianapolis Orphans' Asylum.....	32	19	51	.....	20	31	1	2	4	2	2	1	3	4	3	5	3	4	1	1	2	3	1

TABLE No. 5—Continued.

ORPHANS' HOMES.	NUMBER PRESENT.			Orphans.	Half Orphans.	Both Parents Living.	AGES.																16 Years and Over.
	Boys.	Girls.	Total.				Under 1 Year.	1 Year.	2 Years.	3 Years.	4 Years.	5 Years.	6 Years.	7 Years.	8 Years.	9 Years.	10 Years.	11 Years.	12 years.	13 Years.	14 Years.	15 Years.	
Marion—Home for Friendless Colored Children.	36	22	58	8	10	40	1	2	4	3	5	2	1	1	3	8	5	7	3	5	3	1	...
Marion—German General Protestant.	24	23	47	4	34	9	...	...	...	2	1	1	2	2	3	3	5	7	5	9	3	4	1
Marshall—Work Training School.	145	78	223	15	61	147	...	1	...	1	...	11	3	8	9	13	22	23	26	28	20	26	32
Miami—German Baptist.	52	30	82	2	35	45	...	...	1	...	4	4	6	9	9	8	12	5	6	7	3	6	2
Montgomery.	12	11	23	1	8	14	...	...	...	1	...	3	1	4	3	1	4	1	1	3	1	...	...
Pike.	16	8	24	2	12	10	...	...	...	3	...	2	2	1	2	3	2	3	2	1	2	2	1
Randolph.	11	5	16	...	6	10	...	...	1	2	...	1	1	3	1	3	2	2	1	...	...	...	2
Shelby.	15	8	23	5	11	7	...	...	1	...	1	...	5	2	4	2	3	2	3	...	1	...	...
Spencer.	8	7	15	1	10	4	...	1	...	1	1	1	...	1	3	2	1	...	1	1	3	...	...
St. Joseph—Children's Aid Society.	33	19	52	3	9	40	2	2	2	1	5	1	3	6	3	5	4	5	4	...	2	...	5
Tippecanoe.	6	15	21	1	6	14	...	...	1	1	...	1	1	4	2	...	...	3	1	3	2	1	...
Tippecanoe—Board of Guardians.	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vanderburgh—White.	20	8	28	3	17	8	...	...	...	1	1	1	1	6	1	3	1	6	2	5	1	...	...
Vanderburgh—Colored.	10	8	18	3	5	10	...	1	...	1	...	2	1	2	4	1	2	1	3	2	...	1	...
Vanderburgh—Board of Guardians.	14	19	33	...	5	28	...	...	...	2	...	3	1	1	3	3	2	4	1	3	2	2	4
Vigo—Board of Guardians.	42	35	77	4	20	53	1	1	4	3	5	3	4	7	6	6	6	6	2	3	4	4	12
Wabash—White's Institute.	119	42	161	10	61	90	...	...	...	1	2	1	6	10	8	16	17	19	21	18	14	13	15
Warrick.	5	2	7	...	3	3	...	...	...	...	...	...	2	1	...	...	...	2	...	...	...	...	...
Wells.	14	9	23	...	5	18	...	1	...	1	1	3	...	2	3	4	2	4	...	1	1	...	...
Total.	1,005	577	1,582	105	595	882	17	19	27	40	56	68	80	121	145	164	164	156	128	124	94	73	9

TABLE No. 6.

Children in County Poor Asylums, September 30, 1907.

COUNTIES.	FROM THREE TO SEVENTEEN YEARS.			Under Three Years.	Total.
	Feeble- Minded, Epileptic or Insane.	Sick or Crippled.	Able- Bodied and Bright.		
Adams.....			1		1
Clinton.....			1		1
Delaware.....	1				1
Floyd.....				2	2
Grant.....	1				1
Hancock.....			2	1	3
Hendricks.....				1	1
Henry.....				1	1
Jackson.....			1		1
Jay.....	1				1
Jefferson.....			1	1	2
Lake.....			1		1
Lawrence.....				3	3
Madison.....	1				1
Martin.....			1		1
Monroe.....				2	2
Perry.....	1				1
Pike.....				1	1
Posey.....		1			1
Union.....				1	1
Vermillion.....			1		1
Washington.....				1	1
Wayne.....				1	1
Wells.....				2	2
Total.....	5	1	9	17	32

ORPHANS' HOMES.

INSTITUTION.	OWNED BY	MANAGED BY	MAINTENANCE.	NAME AND ADDRESS OF MATRON OR SUPERINTENDENT.
Allen Co.—Orphans' Home.	County.	Association.	Legal per diem and private donations.	Mrs. Ida M. Overmyer, Ft. Wayne.
Bartholomew Co.—Frances Comfort Thomas Orphans' Home.	County.	B'd of Managers appointed by Com'rs.	Legal per diem.	Mrs. J. M. Brown, Columbus.
Boone Co.—Orphans' Home.	County.	Co. Commissioners.	Salary and expense.	Robert Morrison, Lebanon.
Cass Co.—Orphans' Home.	County.	Association.	Legal per diem.	Mrs. N. R. Carney, Logansport.
Clark Co.—Orphans' Home.	Association.	Association.	Legal per diem and private donations.	Mrs. Julia A. Toomey, Jeffersonville.
Clay Co.—Orphans' Home.	County.	Co. Commissioners.	Salary and expense.	Mrs. Elsie Eagleton, Knightsville.
Davies Co.—Orphans' Home.	County.	Co. Commissioners.	Legal per diem.	Mrs. L. F. Hunemeier, Washington.
Decatur Co.—Children's Home.	County.	Co. Commissioners.	Salary and expense.	Mrs. J. M. Senour, Greensburg.
Delaware Co.—Orphans' Home.	County.	Association.	Legal per diem.	Mrs. S. V. Jump, Muncie.
Floyd Co.—Cornelia Memorial Orphans' Home.	Association.	Association.	Legal per diem.	Mrs. Florence Spickard, New Albany.
Franklin Co.—Orphans' Home.	County.	Co. Commissioners.	Salary and expense.	Mrs. Belle Koerner, Brookville.
Gibson Co.—French Orphans' Home.	County.	Co. Commissioners.	Legal per diem.	Mrs. Ananda Boren, Patoka.
Grant Co.—Orphans' Home.	County.	Association.	Legal per diem.	Miss Jennie Porter, Marion.
Hamilton Co.—Receiving Home.	Children's Home Soc.	Ind'ia Children's Home Society.	Legal per diem and private donations.	R. T. Reagin, Westfield.
Henry and Rush Co.'s—Orphans' Home.	Mrs. Ella F. Bundy.	Mrs. Ella F. Bundy.	Legal per diem.	Mrs. Ella F. Bundy, Spiceland.
Jefferson Co.—Children's Home.	County.	Co. Commissioners.	Salary and expense.	Miss Fannie Brown, Madison.
Johnson Co.—Orphans' Home.	County.	Co. Commissioners.	Salary and expense.	Mrs. Mary F. Atwood, Franklin.
Knox Co.—Orphans' Home.	County.	Association.	Legal per diem.	Miss Minnie Hanna, Vincennes.
Lagrange Co.—Rogers Orphans' Home.	County.	Co. Commissioners.	Legal per diem.	R. Gushwa, Lagrange.
Madison Co.—Orphans' Home.	County.	Association.	Legal per diem and private donations.	Mrs. W. A. Harris, Anderson.
Marion Co.—Indianapolis Orphans' Asylum.	Association.	Association.	Legal per diem and private donations.	Miss Carrie Thrall, Indianapolis.
Marion Co.—German General Protestant Orphan Asylum.	Association.	Association.	Legal per diem and private donations.	Henry F. Roesener, Indianapolis.
Marion Co.—Home for Friendless Colored Children.	Association.	Association.	Legal per diem and private donations.	—, Indianapolis.
Marion Co.—Board of Guardians.	County.	B'd of Guardians.	Expense and legal per diem.	Mrs. Julia H. Goodhart, Sec'y Indianapolis.
Marshall Co.—Julia E. Work Training School.	Mrs. Julia E. Work.	Mrs. Julia E. Work.	Legal per diem.	Mrs. Julia E. Work, Plymouth.
Miami Co.—German Baptist Orphans' Home.	German Baptist Ch.	Church.	Private donations and legal per diem.	Jno. F. Appleman, Mexico.
Montgomery Co.—Orphans' Home.	County.	Association.	Legal per diem.	Mrs. O. W. McDaniel, Crawfordsville.
Pike Co.—Thornton Orphans' Home.	County.	Assoc. ation.	Legal per diem.	Miss Della Gressel, Petersburg.

Randolph Co.—Jas. Moorman Orphans' Home.	Trusteeship	Trustees.....	Legal per diem and private donations.	E. D. Nickey, Winchester.
Shelby Co.—Gordon Children's Home.	County.....	Association.....	Legal per diem and private donations.	Mrs. Mina Dodd, Shelbyville.
Spencer Co.—Veatch Orphans' Home.	County.....	Association.....	Salary and expense.....	Mrs. Louisa Burkheart, Rockport.
St. Joseph Co.—Children's Aid Society.	Association.....	Association.....	Legal per diem and private donations.	Miss Sarah Hathaway, Mishawaka.
Tippecanoe Co.—Children's Home.	Association.....	Association.....	Legal per diem and private donations.	Miss Lilly Janeway, Lafayette.
Vanderburgh Co.—Board of Guardians.	County.....	B'd of Guardians.....	Legal per diem and expense.....	Mrs. Lottie Sudmon, Evansville.
Vanderburgh Co.—Orphans' Home (white).	County.....	Association.....	Legal per diem and private donations.	Miss Sallie Davenport, Evansville.
Vanderburgh Co.—Orphans' Home (colored).	County.....	Association.....	Legal per diem and private donations.	Miss Sallie Davenport, Evansville.
Vigo Co.—Board of Guardians.	County.....	B'd of Guardians.....	Legal per diem and expense.....	Ovid Lawrence, R. F. D., Terre Haute.
Wabash Co.—White's Manual Labor Institute.	Trusteeship	Friends' Church.....	Private donations and legal per diem.....	James Moorman, Wabash.
Warrick Co.—Orphans' Home.	County.....	Association.....	Legal per diem.....	Miss Emma D. Wilder, Boonville.
Wells Co.—Orphans' Home.	County.....	Co. Commissioners.....	Salary and expense.....	George Ulmer, Bluffton.
Allen Co.—St. Vincent's Asylum for Girls.	Ft. Wayne Diocese of Catholic Church.....	Sisters of Providence.....	Private donations.....	_____ Ft. Wayne.
Boone Co.—Crawford Baptist Industrial School.	Baptist Church.....	Baptist Church.....	Private donations.....	W. H. Baldock, Zionsville.
Deatur Co.—I. O. F. Orphan Asylum and Home for Aged.	I. O. F.	B'd Managers I. O. F.	Private donations.....	Mrs. Mary S. Lewis, Greensburg.
Hendricks Co.—Hadley Industrial School.	Indiana W. C. T. U.	B'd Managers W. C. T. U.	Private donation.....	Mrs. Lizzie Hann, Supt., Hadley.
Knox Co.—St. Vincent's Asylum for Boys.	Vincennes Diocese of Catholic Church.....	Sisters of Providence.....	Private donations.....	_____ Vincennes.
Marion Co.—St. Joseph's Training School for Girls.	Vincennes Diocese of Catholic Church.....	Sisters of Providence.....	Private donations.....	_____ Indianapolis.
Marion Co.—German Ev. Lutheran Orphans' Home.	German Lutheran Ch. Pentecost Band.....	Church.....	Private donations.....	Christopher Hankemeier, Indianapolis.
Marion Co.—Pentecost Faith Orphanage.	Pentecost Band.....	Pentecost Band.....	Private donations.....	Rev. T. H. Nelson, Pres., Indianapolis.
Putnam Co.—Mollie Clark Orphans' Home.	Trusteeship.....	Trustees.....	Endowment.....	Esom R. Leach, Greencastle.
Tippecanoe Co.—St. Joseph's Asylum for Boys.	Ft. Wayne Diocese of Catholic Church.....	Trustees.....	Private donations.....	Rev. C. B. Guending, Lafayette.
Vermillion Co.—Collett Home.	Trusteeship.....	Trustees.....	Endowment.....	A. R. Campbell, Newport.
Vigo Co.—Rose Orphan Home.	Trusteeship.....	Trustees.....	Endowment.....	Ernest G. Alden, Terre Haute.
Vigo Co.—St. Ann's Asylum for Girls.	Vincennes Diocese of Catholic Church.....	Sisters of Providence.....	Private donations.....	_____ Terre Haute.
Wayne Co.—Wernle Orphans' Home.	Lutheran Ohio Synod.....	Church.....	Private donations.....	A. F. Klopfer, Richmond.

The last thirteen mentioned are private institutions and receive no public funds.

ORPHANS' HOMES RECEIVING PUBLIC WARDS.

ALLEN COUNTY ORPHANS' HOME—FORT WAYNE.

Mrs. Samuel M. Foster, President, Fort Wayne; E. H. McDonald, Secretary, Fort Wayne; Mrs. John M. Kuhns, Treasurer, Fort Wayne; Mrs. Ida Overmeyer, Matron.

Purpose of institution: Caring for dependent, neglected and abandoned children and fitting them for homes.

Age of children received, up to 18 years.

Capacity, 75.

Homes are found for the children.

Real estate, three acres; belongs to county.

Population September 30, 1907, 57.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending April 5, 1907—

Cash on hand beginning of fiscal year.....	\$60 26
Received from public funds	4,955 30
Received from other sources	1,896 13

Total	\$6,911 69
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Disbursements for the fiscal year ending April 5, 1907—

Salaries	\$1,786 76
Other expenses	5,124 93

Total	\$6,911 69
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FRANCES COMFORT THOMAS ORPHANS' HOME—COLUMBUS.

Howard J. Tooley, President, Columbus; John T. Mahoney, Secretary, Columbus; W. H. Buxton, Treasurer, Columbus; Mrs. J. M. Brown, Matron.

Purpose of institution: Caring for orphan and destitute children of the county.

Age of children received, up to 16 years.

Capacity, 50.

Homes are found for the children.

Real estate, 19 acres.

Population September 30, 1907, 37.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending September 30, 1907—

Received from public funds	\$4,039 89
Received from other sources	755 40

 Total \$4,795 29

Disbursements for the fiscal year ending September 30, 1907—

Cash on hand at end of fiscal year	\$649 24
Salaries	1,577 50
Other expenses	2,568 55

 Total \$4,795 29

BOONE COUNTY ORPHANS' HOME—LEBANON.

Robert Morrison, Superintendent.

Purpose of institution: Caring for dependent children of Boone County.

Age of children received, up to 16 years.

Capacity, 20.

Homes are found for children.

Real estate, 40 acres.

Population September 30, 1907, 4.

FINANCIAL STATEMENT.

Assets \$2,000 00.

Liabilities None

Receipts for the fiscal year ending January 1, 1907—

Received from public funds \$900 00

Disbursements for the fiscal year ending January 1, 1907—

Salaries \$400 00

Other expenses 500 00

 Total \$900 00

CASS COUNTY ORPHANS' HOME ASSOCIATION—LOGANSFORT.

Mrs. Harriet Tomlinson, President, Logansport; Mrs. Quincy A. Myers, Treasurer, Logansport; Mrs. Otto Kraus, Secretary, Logansport; Mrs. Rebecca Carney, Matron.

Purpose of institution: Caring for homeless and friendless children.

Age of children received, up to 16 years.

Capacity, 50.

Homes are found for the children.

Real estate, 2½ acres.

Population September 30, 1907, 17.

FINANCIAL STATEMENT.

Assets	\$1,084 00
Liabilities	60 82
Receipts for the fiscal year ending January 1, 1907—	
Cash on hand beginning of fiscal year	\$1 80
Received from public funds	1,783 23
Received from other sources	962 50
Total	\$2,747 53
Disbursements for the fiscal year ending January 1, 1907—	
Cash on hand at end of fiscal year	\$1,084 20
Salaries	397 00
Other expenses	1,266 33
Total	\$2,747 53

JEFFERSONVILLE ORPHANS' HOME—JEFFERSONVILLE.

Mrs. William Morris, President, Jeffersonville; Mrs. Annie Thias, Treasurer, Jeffersonville; Miss Alia C. Smith, Secretary, Jeffersonville.

Purpose of institution: Caring for county wards.

Age of children received, from 3 to 14 years.

Capacity, 40.

Homes are found for the children.

Real estate, 1 acre.

Population September 30, 1907, 30.

FINANCIAL STATEMENT.

Receipts for the last fiscal year—	
Cash on hand beginning of fiscal year	\$1,366 72
Received from public funds	2,111 50
Received from other sources	25 00
Total	\$3,503 22
Disbursements for the last fiscal year—	
Cash on hand at the end of fiscal year	\$1,378 22
Salaries	850 00
Other expenses	1,275 00
Total	\$3,503 22

CLAY COUNTY ORPHANS' HOME—KNIGHTSVILLE.

Mrs. Elsie Eagleton, Matron.

Purpose of institution: Caring for orphan and dependent children.

Age of children received, from 18 months to 15 years.

Capacity, 25.

Homes are found for the children.

Real estate, 12 acres.

Population September 30, 1907, 15.

FINANCIAL STATEMENT.

This institution is supported entirely by appropriations from the public funds. The matron receives a salary of \$30 a month. For the fiscal year ending December 31, 1906, the County Auditor reported \$2,202.69 paid out on account of dependent children.

DAVIESS COUNTY ORPHANS' HOME—WASHINGTON.

Mrs. L. F. Hunnemier, Matron.

Purpose of institution: A home for orphan and dependent children.

Age of children received, up to 16 years.

Capacity, 60.

Homes are found for the children.

Real estate, 8 lots.

Population September 30, 1907, 39.

FINANCIAL STATEMENT.

This institution belongs to the county. The legal per diem is received for the maintenance of the children. The amount reported by the County Auditor as paid out on account of dependent children for the year ending December 31, 1906, is \$5,251.95.

DECATUR COUNTY ORPHANS' HOME—GREENSBURG.

Mrs. J. M. Senour, Matron.

Purpose of institution: Caring for dependent and neglected children.

Age of children received, up to 16 years.

Capacity, 40.

Homes are found for the children.

Real estate, one full block.

Population September 30, 1907, 9.

FINANCIAL STATEMENT.

The Home is supported by public funds. For the fiscal year ending December 31, 1906, the County Auditor reported \$2,171.33 paid out on account of dependent children.

DELAWARE COUNTY CHILDREN'S HOME—MUNCIE.

Dr. H. A. Cowing, President, Muncie; John W. Dragoo, Vice-President, Muncie; Mrs. Nellie M. Stouder, Secretary, Muncie; Mrs. S. V. Jump, Matron, Muncie.

Purpose of the institution: Caring for dependent and neglected children.

Age of children received, up to 16 years.

Capacity, 100.

Homes are found for the children.

Real estate, 40 acres.

Population September 30, 1907, 27.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending February 1, 1907—

Cash on hand beginning of fiscal year	\$886 21
Received from public funds	3,046 33
Received from other sources	57 40

Total	\$3,989 94
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Disbursements for the fiscal year ending February 1, 1907—

Cash on hand at end of fiscal year	\$902 64
Salaries	1,430 08
Other expenses	1,657 22

Total	\$3,989 94
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CORNELIA MEMORIAL ORPHANS' HOME—NEW ALBANY.

Mrs. George Penn, President, New Albany; Mrs. Annie G. Elgin, Recording Secretary, New Albany; Mrs. Mary Collins, Treasurer, New Albany; Mrs. A. Garey, Corresponding Secretary, New Albany.

Purpose of institution: Caring for destitute orphan children.

Age of children received, up to 14 years.

Capacity, 60.

Homes are found for the children.

Real estate, $\frac{1}{2}$ acre.

Population September 30, 1907, 24.

FINANCIAL STATEMENT.

Assets	\$5,000 00
Liabilities	None

Receipts for the fiscal year ending October 31, 1907—

Received from public funds	\$1,800 00
Received from other sources	200 00

Total	\$2,000 00
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Disbursements for the fiscal year ending October 31, 1907—

Salaries	\$416 00
Other expenses	1,584 00
Total	<u>\$2,000 00</u>

FRANKLIN COUNTY ORPHANS' HOME—BROOKVILLE.

Mrs. Belle Koerner, Matron.

Purpose of institution: Care of dependent children.

Age of children received, from 1 to 16 years.

Capacity, 28.

Homes are found for the children.

Real estate, 67 acres.

Population September 30, 1907, 8.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending December 31, 1906—

Received from public funds	\$1,217 50
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Disbursements for the fiscal year ending December 31, 1906—

Salaries	\$425 00
Other expenses	792 50

Total	<u>\$1,217 50</u>
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FRENCH ORPHANS' HOME—PAI OKA.

Mrs. Amanda M. Boren, Matron.

Purpose of institution: Caring for dependent children.

Age of children received, up to 16 years.

Capacity, 50.

Homes are found for the children.

Real estate, 5 acres.

Population September 30, 1907, 19.

FINANCIAL STATEMENT.

The Home receives the legal per diem for the maintenance of each child. For the year ending December 31, 1906, the report of the County Auditor shows \$3,213.05 paid out on account of dependent children.

GRANT COUNTY ORPHANS' HOME AND MANUAL TRAINING SCHOOL—MARION.

Mrs. Sarah Ann Small, President, Marion; Mrs. Emma H. Sweetser, Vice-President, Marion; Mrs. Mary T. Buchanan, Secretary, Marion; Mrs. Mary C. Sweetser, Treasurer, Marion; Miss Jennie Porter, Matron.

Purpose of institution: Caring for dependent children.

Age of children received, boys to 17 years, girls to 18 years.

Capacity, 80.

Homes are found for the children.

Real estate, 36 acres.

Population September 30, 1907, 76.

FINANCIAL STATEMENT.

Assets	\$2,250 00
Liabilities	None
Receipts for the fiscal year ending June 10, 1907—	
Cash on hand beginning of fiscal year.....	\$6,177 87
Received from public funds	8,727 45
Received from other sources	329 45
Total	\$15,234 57
Disbursements for the fiscal year ending June 10, 1907—	
Cash on hand at end of fiscal year.....	\$3,779 00
Salaries and other expenses	11,455 57
Total	\$15,234 57

HENRY AND RUSH COUNTIES ORPHANS' HOME—SPICELAND.

Mrs. Ella Bundy, owner and Matron.

Purpose of institution: Caring for dependent children.

Age of children received, up to 16 years.

Capacity, 50.

Homes are found for the children.

Real estate, 5½ acres.

Population September 30, 1907, 40.

FINANCIAL STATEMENT.

The source of support is the garden and the legal per diem received from the counties for the care of public wards. The reports of the auditors of these two counties show a total expenditure of \$4,247.34 for the year 1906, on account of dependent children.

JOHNSON COUNTY ORPHANS' HOME—FRANKLIN.

Mrs. Mary F. Atwood, Matron.

Purpose of institution: Caring for dependent children.

Age of children received, up to 17 years.

Capacity, 36.

Homes are found for the children.

Real estate, one acre.

Population September 30, 1907, 15.

FINANCIAL STATEMENT.

The institution is under the control of the Board of County Commissioners. The County Auditor reports an expenditure of \$2,035.81 on account of dependent children for the year ending December 31, 1906.

KNOX COUNTY ORPHANS' HOME—VINCENNES.

Mrs. Charles Bierhaus, President, Vincennes; Mrs. Emma Judah, Secretary, Vincennes; Mr. W. J. Nicholson, Treasurer, Vincennes; Miss Minnie Hanna, Matron.

Purpose of institution: Caring for dependent children.

Age of children received, up to 14 years.

Capacity, 60.

Homes are found for the children.

Real estate, 15 acres.

Population September 30, 1907, 35.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending May 1, 1907—

Cash on hand beginning of fiscal year.....	\$481 53
Received from public funds	4,445 14
Received from other sources	300 33

Total	\$5,227 00
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Disbursements for the fiscal year ending May 1, 1907—

Cash on hand at end of fiscal year	\$205 10
Salaries	1,668 00
Other expenses	3,353 90

Total	\$5,227 00
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ROGERS ORPHANS' HOME—LAGRANGE.

R. Gushwa, Superintendent.

Caring for orphan and dependent children of Lagrange County.

Age of children received, from 1 to 16 years.

Capacity, 30.

Homes are found for the children.

Real estate, 80 acres.

Population September 30, 1907, 5.

FINANCIAL STATEMENT.

This Home is located on a farm which was willed in perpetual trust to the Board of County Commissioners. The children are maintained at the legal per diem. For the fiscal year ending December 31, 1906, the county paid out for dependent children \$714.65.

CHILDREN'S HOME ASSOCIATION OF MADISON COUNTY—ANDERSON.

Mrs. W. B. Campbell, President, Anderson; Mrs. C. B. Meckel, Secretary, Anderson; Mr. George F. Quick, Treasurer, Anderson; Mrs. W. A. Harris, Matron.

Purpose of institution: Caring for dependent children.

Age of children received, between 2 and 15 years.

Capacity, 50.

Homes are found for the children.

Real estate, 10 acres.

Population September 30, 1907, 23.

FINANCIAL STATEMENT.

Receipts for the last fiscal year—

Cash on hand beginning of fiscal year	\$1,314 03
Received from public funds	3,070 79
Received from other sources	166 72

Total	\$4,551 54
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Disbursements for the last fiscal year—

Cash on hand at end of fiscal year.....	\$1,246 04
Salaries	1,079 00
Other expenses	2,226 50

Total	\$4,551 54
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MARION COUNTY BOARD OF CHILDREN'S GUARDIANS—INDIANAPOLIS.

Charles F. Coffin, President, Indianapolis; Mrs. Anna C. Reaume, Vice-President, Indianapolis; Mrs. Julia H. Goodhart, Secretary and Treasurer, Indianapolis.

Purpose of institution: Temporary home for dependent and neglected children.

Age of children received, up to 16 years.

Capacity, 100.

Homes are found for the children.

Real estate, 4 acres.

Population September 30, 1907, 39.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending March 31, 1907—

Cash on hand beginning of fiscal year	\$351 91
Received from public funds	10,753 80
Received from other sources	115 00

Total	\$11,220 71
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Disbursements for the fiscal year ending March 31, 1907—

Cash on hand at end of fiscal year	\$775 96
Salaries	3,013 10
Other expenses	7,431 65
Total	\$11,220 71

INDIANA CHILDREN'S HOME SOCIETY—WESTFIELD.

Rev. D. R. Lucas, President, Indianapolis; R. T. Reagin, Superintendent, Indianapolis; Mary H. Edgeworth, Secretary, Indianapolis.

Purpose of institution: Placing children in family homes.

Age of children received, up to 14 years.

Capacity, 75.

Homes are found for the children.

Real estate, 13 acres.

Population September 30, 1907, 57.

FINANCIAL STATEMENT.

Assets	\$6,490 34
Liabilities	916 67
Receipts for the fiscal year ending May 31, 1907—	
Cash on hand beginning of fiscal year	\$753 80
Received from public funds	4,401 55
Received from other sources	7,226 35
Total	\$12,381 70
Disbursements for the fiscal year ending May 31, 1907—	
Cash on hand at end of fiscal year	\$687 66
Salaries	4,747 47
Other expenses	6,946 57
Total	\$12,381 70

INDIANAPOLIS ORPHANS' ASYLUM—INDIANAPOLIS.

Mrs. John B. Elam, President, Indianapolis; Mrs. Amelia H. Wells, Secretary, Indianapolis; Mrs. F. F. McCrea, Treasurer, Indianapolis; Miss Carrie Thrall, Matron.

Purpose of institution: Care of dependent children.

Age of children received, up to 12 years.

Capacity, 125.

Homes are found for the children.

Real estate, 6 acres.

Population September 30, 1907, 51.

FINANCIAL STATEMENT.

Assets	\$85,000 00
Liabilities	6,000 00
Receipts for the fiscal year ending April 30, 1907—	
Cash on hand beginning of fiscal year.....	\$547 36
Received from public funds	10,651 40
Received from other sources	4,797 82
Total	\$15,996 58
Disbursements for the fiscal year ending April 30, 1907—	
Cash on hand at end of fiscal year	\$175 78
Salaries	5,484 51
Other expenses	10,336 29
Total	\$15,996 58

HOME FOR FRIENDLESS COLORED CHILDREN—INDIANAPOLIS.

Mrs. Alice R. Taylor, President, Indianapolis; Clara Pennington, Secretary, Indianapolis; S. S. Adams, Treasurer, Indianapolis.

Purpose of institution: Care of dependent children.

Age of children received, up to 14 years.

Capacity, 70.

Homes are found for the children.

Real estate, one-quarter of a city square.

Population September 30, 1907, 58.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending March 14, 1907—	
Cash on hand beginning of fiscal year.....	\$969 94
Received from public funds	6,572 41
Received from other sources	447 75
Total	\$7,990 10
Disbursements for the fiscal year ending March 14, 1907—	
Cash on hand at end of fiscal year.....	\$1,198 45
Salaries	1,793 20
Other expenses	4,998 45
Total	\$7,990 10

JULIA E. WORK TRAINING SCHOOL—PLYMOUTH.

Mrs. Julia E. Work, Superintendent; Miss Annie A. Barr, Assistant Superintendent and Secretary.

Purpose of institution: The care and training of dependent and delinquent children.

Age of children received, between 5 and 17 years.

Capacity, 280.

Homes are found for the placeable children.

Real estate, 270 acres.

Population September 30, 1907, 223.

FINANCIAL STATEMENT.

Assets	\$32,000 00
Liabilities	6,000 00
Receipts for the fiscal year ending October 31, 1907—	
Received from public funds	\$25,177 02
Received from other sources	1,144 75
Total	<u>\$26,321 77</u>
Disbursements for the fiscal year ending October 31, 1907—	
Salaries	\$3,075 00
Other expenses	23,246 77
Total	<u>\$26,321 77</u>

OLD FOLKS' AND ORPHAN CHILDRENS' HOME—MEXICO.

John F. Appleman, Superintendent; J. E. Miller, Treasurer, Mexico.

Purpose of institution: A home for the homeless.

Age of children received, up to 16 years.

Capacity, 120.

Homes are found for the placeable children.

Real estate, 30 acres.

Population September 30, 1907, 82.

FINANCIAL STATEMENT.

Assets	\$15,000 00
Liabilities	None
Receipts for the last fiscal year—	
Cash on hand beginning of fiscal year	\$1,162 98
Received from public funds	7,409 77
Total	<u>\$8,572 75</u>
Disbursements for the last fiscal year—	
Cash on hand at end of fiscal year	\$653 52
Salaries and other expenses	7,919 23
Total	<u>\$8,572 75</u>

MONTGOMERY COUNTY ORPHANS' HOME ASSOCIATION—
CRAWFORDSVILLE.

H. H. Ristine, President, Crawfordsville; Robert Williams, Secretary, Crawfordsville; Mrs. S. S. McCain, Treasurer, Crawfordsville; Mrs. W. H. McDaniel, Matron.

Purpose of institution: Caring for orphans and dependent children.

Age of children received, up to 16 years.

Capacity, 35.

Homes are found for the children.

Real estate, 8 acres.

Population September 30, 1907, 23.

FINANCIAL STATEMENT.

Assets	\$1,000 00
Liabilities	None.
Receipts for the fiscal year ending December 31, 1906—	
Cash on hand beginning of fiscal year.....	1 62
Received from public funds	2,386 75
Received from other sources	55 75
Total	<u>\$2,444 12</u>
Disbursements for the fiscal year ending December 31, 1906—	
Cash on hand at end of fiscal year.....	\$584 20
Salaries	500 00
Other expenses	1,359 92
Total	<u>\$2,444 12</u>

PIKE COUNTY ORPHANS' HOME—PETERSBURG.

Mrs. Lucy M. Gray, President, Otwell; Mrs. Arda Posey, Treasurer, Petersburg; Mrs. Kittie G. Dillon, Secretary, Petersburg; Miss Delia Gressel, Matron.

Purpose of institution: Care of orphan children.

Age of children received, between 3 and 16 years.

Capacity, 40.

Homes are found for the children.

Real estate, 1 acre.

Population September 30, 1907, 24.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending August 31, 1907—	
Cash on hand beginning of fiscal year	\$596 52
Received from public funds	2,262 95
Total	<u>\$2,859 47</u>

Disbursements for the fiscal year ending August 31, 1907—

Cash on hand at end of fiscal year.....	\$550 92
Salaries and other expenses	2,308 55
Total	<u>\$2,859 47</u>

JAMES MOORMAN ORPHANS' HOME—WINCHESTER.

Benjamin F. Marsh, Secretary, Winchester; Thomas F. Moorman, Treasurer, Winchester; E. D. Nickey, Superintendent.

Purpose of institution: Caring for dependent children.

Age of children received, from 4 to 14 years.

Capacity, 40.

Homes are found for the children.

Real estate, 174 acres.

Population September 30, 1907, 16.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending September 30, 1907—

Cash on hand beginning of fiscal year.....	\$294 94
Received from public funds	1,972 20
Received from other sources	1,728 44
Receipts from farm	811 58
Total	<u>\$4,807 16</u>

Disbursements for the fiscal year ending September 30, 1907—

Cash on hand at end of fiscal year.....	\$606 17
Salaries	1,500 00
Other expenses	2,701 31
Total	<u>\$4,807 48</u>

GORDON CHILDREN'S HOME—SHELBYVILLE.

Mrs. John DePrez, President, Shelbyville; Mrs. K. M. Hord, Treasurer, Shelbyville; Mrs. V. Williams, Secretary, Shelbyville; Mrs. Mima Dodd, Matron.

Purpose of institution: Caring for dependent and friendless children.

Age of children received, up to 14 years.

Capacity, 50.

Homes are found for the children.

Real estate, 2½ acres.

Population September 30, 1907, 23.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending November 10, 1907—

Cash on hand beginning of fiscal year.....	\$421 55
Received from public funds	3,077 55
Total	\$3,499 10

Disbursements for the fiscal year ending November 10, 1907—

Cash on hand at end of fiscal year	\$566 27
Salaries and other expenses	2,932 83

Total	\$3,499 10
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VEATCH ORPHANS' HOME—ROCKPORT.

J. G. Rimstidt, President, Rockport; Mrs. Augusta Jacobs, Secretary, Rockport; Mrs. Helen R. Swan, Treasurer, Rockport; Mrs. Louisa Burkheart, Matron.

Purpose of institution: Care of dependent children.

Age of children received, up to 16 years.

Capacity, 30.

Homes are found for the children.

Real estate, 12 acres.

Population September 30, 1907, 15.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending December 31, 1907—

Cash on hand beginning of fiscal year.....	\$120 42
Received from public funds	1,645 95
Received from other sources	10 00

Total	\$1,776 37
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Disbursements for the fiscal year ending December 31, 1907—

Cash on hand at end of fiscal year.....	\$79 30
Salaries and other expenses	1,697 07

Total	\$1,776 37
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CHILDREN'S AID SOCIETY OF INDIANA—MISHAWAKA.

Mrs. J. McM. Smith, President, South Bend; Mrs. E. G. Ketting, Treasurer, South Bend; Mrs. W. E. Butterworth, Secretary, Mishawaka; Miss Sarah Hathaway, Matron.

Purpose of institution: Temporary home and training for dependent children.

Age of children received, up to 17 years.

Capacity, 150.

Homes are found for the children.

Real estate, 10 acres.

Population September 30, 1907, 52.

FINANCIAL STATEMENT.

Assets	Grounds, Buildings and Contents	
Liabilities		\$25,000 00
Receipts for the fiscal year ending April 1, 1907—		
Cash on hand beginning of fiscal year		\$11,223 13
Received from public funds		5,684 90
Received from other sources		36,458 49
Total		\$53,366 52
Disbursements for fiscal year ending April 1, 1907—		
Cash on hand at end of fiscal year		\$1,384 42
Salaries and other expenses		51,982 10
Total		\$53,366 52

TIPPECANOE COUNTY CHILDREN'S HOME—LAFAYETTE.

Col. C. G. Thompson, President, Lafayette; Mrs. R. D. Moore,

Treasurer, Lafayette; Mrs. J. M. Boggs, Secretary, Lafayette.

Purpose of institution: Caring for needy children.

Age of children received, between 2 and 15 years.

Capacity, 50.

Homes are found for the children.

Real estate, four city lots.

Population September 30, 1907, 21.

FINANCIAL STATEMENT.

Assets		\$9,000 00
Liabilities		None
Receipts for the fiscal year ending January 1, 1907—		
Cash on hand beginning of fiscal year		\$1,000 00
Received from public funds		2,000 00
Received from other sources		836 00
Total		\$3,836 00
Disbursements for the fiscal year ending January 1, 1907—		
Cash on hand at end of fiscal year		\$1,000 00
Salaries		360 00
Other expenses		2,476 00
Total		\$3,836 00

THE EVANSVILLE ORPHAN ASYLUM—EVANSVILLE.

Mrs. William Weintz, President, Evansville; Miss Sarah D. Wartmann, Secretary, Evansville; Miss Sallie Davenport, Matron.

Purpose of institution: Caring for dependent children.

Age of children received, all children of legal age.

Capacity, white, 50; colored, 40.

Homes are found for the children.

Real estate, 10 acres.

Population September 30, 1907: White, 28; colored, 18.

FINANCIAL STATEMENT.

Receipts for the last fiscal year—

Received from public funds	\$1,406 20
Received from other sources	738 20

Total	\$5,144 40
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Disbursements for the last fiscal year—

Salaries	\$2,088 93
Other expenses	3,055 47

Total	\$5,144 40
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VANDERBURGH COUNTY BOARD OF CHILDREN'S GUARDIANS—EVANSVILLE.

Sidney W. Douglas, President, Evansville; Dr. Katherine Snyder Busse, Secretary, Evansville; Silas Ichenhauser, Treasurer, Evansville; Mrs. Lottie Saulman, Matron, Evansville.

Purpose of institution: Temporary home for dependent children.

Age of children received, up to 15 years.

Capacity, 30.

Homes are found for the children.

Real estate, 6½ acres.

Population September 30, 1907, 33.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending January 1, 1907—

Received from public funds	\$4,300 00
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Disbursements for the fiscal year ending January 1, 1907—

Salaries	\$1,920 00
Other expenses	2,380 00

Total	\$4,300 00
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VIGO COUNTY HOME FOR DEPENDENT CHILDREN—TERRE HAUTE.

Ovid Lawrence, Superintendent.

Purpose of institution: Caring for dependent children.

Age of children received, up to 21 years.

Capacity, 90.

Homes are found for the children.

Real estate, 60 acres.

Population September 30, 1907, 77.

FINANCIAL STATEMENT.

Assets	\$66,000 00
Liabilities	None
Receipts for the fiscal year ending December 31, 1906—	
Cash on hand beginning of fiscal year.....	\$399 36
Received from public funds	9,919 75
Received from other sources	1,076 76
Total	\$11,395 87
Disbursements for the fiscal year ending December 31, 1906—	
Cash on hand at end of fiscal year	\$300 05
Salaries	3,424 16
Other expenses	6,608 26
Cash paid to County Treasury	1,063 40
Total	\$11,395 87

WHITE'S INDIANA MANUAL LABOR INSTITUTE—TREATY.

Nathan T. Gilbert, President, Wabash; Isaac Elliott, Secretary, Fairmount; James H. Moorman, Superintendent and Treasurer, Wabash.

Purpose of institution: Caring for dependent children.

Age of children received, between 4 and 16 years.

Capacity, 200.

Homes are found for the children.

Real estate, 600 acres.

Population September 30, 1907, 161.

FINANCIAL STATEMENT.

Assets	\$15,546 78
Liabilities	9,500 00
Receipts for the fiscal year ending August 31, 1907—	
Cash on hand beginning of fiscal year.....	\$440 98
Received from public funds	15,024 10
Received from other sources	12,513 36
Total	\$27,978 44

Disbursements for the fiscal year ending August 31, 1907—

Cash on hand at end of fiscal year.....	\$235 08
Salaries	4,928 77
Other expenses	22,814 59
Total	\$27,978 44

WARRICK COUNTY ORPHANS' HOME ASSOCIATION—BOONVILLE.

Clark Thomas, President, Boonville; Albert W. Picker, Treasurer, Boonville; E. C. Hargrave, Secretary, Boonville; J. H. McCulla, Superintendent, Boonville; Belle Seitz, Matron.

Purpose of institution: Care of orphan children.

Age of children received, up to 16 years.

Capacity, 40.

Homes are found for the children.

Real estate, 4 acres.

Population September 30, 1907, 7.

FINANCIAL STATEMENT.

Receipts for the fiscal year ending February, 1907—

Cash on hand beginning of fiscal year.....	\$527 11
Received from public funds	587 25
Received from other sources	153 80
Total	\$1,268 16

Disbursements for the fiscal year ending February, 1907—

Cash on hand at end of fiscal year.....	\$362 32
Other expenses	905 84
Total	\$1,268 16

WELLS COUNTY ORPHANS' HOME—BLUFFTON.

George Ulmer, Superintendent.

Purpose of institution: Caring for dependent children.

Age of children received, up to 17 years.

Capacity, 50.

Homes are found for the children.

Real estate, 120 acres.

Population September 30, 1907, 23.

FINANCIAL STATEMENT.

The expenses of the institution are paid by the county. The County Auditor reported \$2,126.18 paid out on account of dependent children for the year ending December 31, 1906.

PRIVATE ORPHANS' HOMES.

ST. VINCENT'S ORPHAN ASYLUM—FORT WAYNE.

Under the direction of Rt. Rev. Herman J. Alerding, Bishop.

Purpose of institution: Care of Catholic orphan girls of the Fort Wayne Diocese.

Age of children received: Between the ages of 4 and 12 years.

Capacity, 150.

Homes are found for the children.

Real estate: 40 acres.

The work is under the auspices of the Roman Catholic Church.

Territory covered: Diocese of Fort Wayne, northern half of Indiana.

Source of support: Free will offerings of the Catholics of the diocese and generously disposed non-Catholics; also a bequest made by testament.

Girls.

Number of children on hand November 1, 1906..... 123

Number received from November 1, 1906, to September 30, 1907..... • 31

Number who have gone out during same period 46

Number on hand September 30, 1907 108

THE FORT WAYNE ORPHAN HOME OF THE REFORMED CHURCH IN THE UNITED STATES—FORT WAYNE.

Rev. J. Winter, Terre Haute, President; Rev. P. S. Kohler, St. Mary's, Ohio, Secretary; Rev. J. H. Bosch, Fort Wayne, Treasurer; Rev. B. Ruf, Fort Wayne, Superintendent.

Purpose of institution: The care of orphans.

Age of children received: From 2 to 18 years.

Capacity: 120.

Homes are not found for the children.

Real estate: 157 acres.

The work is under the auspices of the Reformed Church of the United States.

Territory covered: The United States.

Source of support: Free will offerings of members of the Reformed Church.

	Boys.	Girls.	Total.
Number of children on hand Nov. 1, 1906.....			103
Number received from Nov. 1, 1906, to Sept. 30, 1907..			15
Number who have gone out during the same period....			46
Number on hand September 30, 1907	48	49	98

CRAWFORD BAPTIST INDUSTRIAL SCHOOL—ZIONSVILLE.

S. O. Pickens, Indianapolis, President; C. H. McDowell, Indianapolis, Secretary; Grafton Johnson, Greenwood, Treasurer; Rev. G. H. Jayne, Shelbyville, Financial Secretary; W. H. Baldock, Zionsville, Superintendent; A. A. Barnes, Henry Eitel, Dr. G. V. Woollen, all of Indianapolis, Trustees.

Purpose of institution: To give a home and educate orphan children.

Age of children received: Up to 12 years.

Capacity: 30. After January, 1908, when the new building is completed, the capacity will be 75.

Homes are found for the children.

Real estate: 315 acres.

The work is under the auspices of the Baptists of Indiana.

Territory covered: Indiana.

Source of support: Voluntary contributions and products of the farm.

	Boys.	Girls.	Total.
Number of children on hand November 1, 1906.....			6
Number received from November 1, 1906, to September 30, 1907			25
Number who have gone out during the same period...			1
Number on hand September 30, 1907	15	15	30

BROWN COUNTY ORPHANAGE AND CHRISTIAN WORKERS' HOME
—NINEVEH.

C. E. Spicer, Nineveh, President; Mrs. Adaline Hawkins, Nineveh, Matron and Secretary; C. E. Spicer, Nineveh, and E. J. Beatty, Southport, Trustees.

Purpose of institution: "To fulfill our idea of primitive Christianity."

Age of children received: Up to 12 years of age.

Capacity: 10.

Homes are not found for the children.

Real estate: 40 acres.

Territory covered: Brown County, Indiana.

Source of support: Self-support and donations.

Girls.

Number of children on hand November 1, 1906.....	3
Number received from November 1, 1906, to September 30, 1907.....	1
Number who have gone out during same period.....	0
Number on hand September 30, 1907	4

I. O. O. F. HOME—GREENSBURG.

Louise Langjahr, Lebanon, President; Artie S. Andrews, Lafayette, Vice-President; Mellie Lindsay, Past President, Kokomo; C. I. Ainsworth, Greensburg, Secretary.

Purpose of institution: The care of indigent Odd Fellows, their wives, widows and orphans.

Age of children received: Up to 14 years.

Capacity: 200 adults and children.

Homes are found for the children.

Real estate: 136 acres.

The work is under the auspices of the I. O. O. F.

Territory covered: Indiana.

Source of support: A per capita tax on each member of the Order.

	Boys.	Girls.	Total.
Number of children on hand November 1, 1906.....	18	14	32
Number received from November 1, 1906, to September 30, 1907			21
Number who have gone out during same period.....			16
Number on hand September 30, 1907.....			37

AGED PERSONS' HOME AND ORPHAN ASYLUM—HONEY CREEK.

Under the auspices of the German Baptist Church.

Officers: Abraham Holler, Hagerstown; D. F. Hoover, Middletown; David Miller, Middletown; Daniel Frank, Connersville.

Purpose of institution: To care for orphans and needy members of the German Baptist Church of Southern Indiana.

Age of children received: Between the ages of 2 and 15 years.

Capacity: 40.

Homes are found for the children.

Real estate: 144 acres.

Territory covered: Southern district of Indiana.

Source of support: Churches of German Baptist denomination in Southern Indiana.

Number of children on hand November 1, 1906	13
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INDIANA W. C. T. U. HADLEY INDUSTRIAL SCHOOL FOR GIRLS
—HADLEY.

Mrs. Lizzie C. Hann, Indianapolis, President; Mrs. Lida Outland, Upland, Secretary.

Purpose of institution: Caring for worthy, needy girls.

Age of children received: Between the ages of 6 and 12 years.

Capacity: 30.

Homes are found for the children.

Real estate: 110 acres.

The work is under the auspices of the W. C. T. U.

Territory covered: Indiana.

Source of support: Voluntary contributions and receipts from the farm.

Girls.

Number of children on hand November 1, 1906.....	10
Number received from November 1, 1906, to September 30, 1907.....	4
Number who have gone out during same period.....	2
Number on hand September 30, 1907.....	12

ST. VINCENT'S ASYLUM—VINCENNES.

Rev. D. O'Donaghue, Indianapolis, Manager. The Sisters of Providence in charge.

Purpose of institution: The care of orphan boys.

Age of children received: From 3 to 12 years.

Capacity: 125.

Homes are found for the children.

Real estate: 300 acres.

Territory covered: Southern half of Indiana.

Source of support: Collections taken in Catholic Churches at Christmas.

Boys.

Number of children on hand November 1, 1906.....	74
Number received from November 1, 1906, to September 30, 1907.....	17
Number who have gone out during the same period	16
Number on hand September 30, 1907	75

GERMAN EVANGELICAL LUTHERAN ORPHANS' HOME—INDIAN-
APOLIS.

Orphan-Father, Christ. Hankemeyer; Rev. P. Seuel, President.

Purpose of institution: The care and education of orphans.

Age of children received: Between 2 and 11 years.

Capacity: 60.

Homes are found for the children in Lutheran families only.

Real estate: 6½ acres.

The work is under the auspices of the Orphans' Society.

Territory covered: The States of Indiana and Ohio and part of Kentucky.

Source of support: Free gifts from Home Society and donations from Lutheran Churches in Indiana and Ohio.

	Boys.	Girls.	Total.
Number of children on hand November 1, 1906.....	26	21	47
Number received from November 1, 1906, to September 30, 1907	8	7	15
Number who have gone out during same period.....	4	3	7
Number on hand September 30, 1907	32	29	61

ST. JOSEPH'S TRAINING SCHOOL—INDIANAPOLIS.

Rev. D. O'Donaghue, Indianapolis, Manager. The Sisters of Providence in charge.

Purpose of institution: An industrial school for girls.

Age of children received: 12 years and over.

Capacity: 30.

The children are kept as long as they wish to remain. Most of them at the proper age find occupation at different kinds of employment.

Territory covered: Southern half of Indiana.

Source of support: Work done in the institution; charitable offerings from those disposed to give; residue paid from the Orphan fund of the Diocese of Indianapolis.

	Girls.
Number of children on hand November 1, 1906.....	21
Number received from November 1, 1906, to September 30, 1907.....	4
Number who have gone out during same period	3
Number on hand September 30, 1907.....	22

PENTECOST BAND FAITH ORPHANAGE—BRIDGEPORT.

Rev. T. H. Nelson, Indianapolis, President; Carson McCaw, Bridgeport, Superintendent; Bertha Bauman, Bridgeport, Matron.

Purpose of institution: The support of homeless children.

Age of children received: From 1 to 12 years.

Capacity: 30.

Homes are not found for the children.

Real estate: 150 acres.

The work is under the auspices of the Pentecost Band Mission.

Territory covered: The State of Indiana.

Source of support: Products from farm and church donations.

	Boys.	Girls.	Total.
Number of children on hand November 1, 1906.....	12	9	21
Number received from November 1, 1906, to September 30, 1907			6
Number who have gone out during the same period...			2
Number on hand September 30, 1907.....			25

ST. JOSEPH'S ORPHAN ASYLUM AND MANUAL LABOR INSTITUTE
—LAFAYETTE.

Rev. Charles B. Guendling, Lafayette, Superintendent and Director.

Purpose of institution: Home for Catholic orphans and destitute and neglected children.

Age of children received: Between 11½ and 14 years.

Capacity: 175.

Homes are found for the children.

Real estate: 617 acres.

The work is under the auspices of the Roman Catholic Church, in the Diocese of Fort Wayne.

Territory covered: Northern Indiana.

Source of support: Income from farm and charity of Catholics and non-Catholics.

	Boys.
Number of children on hand November 1, 1906	160
Number received from November 1, 1906, to September 30, 1907.....	32
Number who have gone out during the same period.....	45
Number on hand September 30, 1907	136

COLLETT HOME FOR ORPHANS—CAYUGA.

John Henderson, Quaker, President; C. W. Ward, Newport, Secretary and Superintendent; John S. Grandyke, Treasurer.

Purpose of institution: A home for orphans.

Age of children received: Between 3 and 15 years.

Capacity: 30.

Homes are found for the children.

Real estate: 400 acres.

Beneficiaries of the Home must be residents of Vermillion County.

Source of support: Farm and endowment.

Number of children on hand November 1, 1906	7
Number received from November 1, 1906, to September 30, 1907.....	1
Number who have gone out during same period	1
Number on hand September 30, 1907.....	7

ST. ANN'S ASYLUM FOR GIRLS—TERRE HAUTE.

Rev. D. O'Donaghue, Indianapolis, Manager. The Sisters of Providence in charge.

Purpose of institution: Caring for orphan girls.

Age of children received: From 3 to 12 years.

Capacity: 100.

Homes are found for the children.

Real estate: 4 acres.

Territory covered: Southern half of Indiana.

Source of support: Collections taken in Catholic Churches at Christmas.

	Girls.
Number of children on hand November 1, 1906	70
Number received from November 1, 1906, to September 30, 1907.....	15
Number who have gone out during same period.....	16
Number on hand September 30, 1907.....	69

THE ROSE ORPHAN HOME—TERRE HAUTE.

W. R. McKeen, Terre Haute, President; George E. Farrington, Terre Haute, Secretary; Preston Hussey, Terre Haute, Treasurer; E. G. Alden, Terre Haute, Superintendent.

Purpose of institution: Caring for orphan and half-orphan children.

Age of children received: From 3 to 14 years. Residents of Vigo County for six months.

Capacity: 100.

Homes are found for the children.

Real estate: 20 acres.

Source of support: Endowment of \$370,000, besides land and buildings.

	Boys.	Girls.	Total.
Number of children on hand November 1, 1906.....	54	29	83
Number received from November 1, 1906, to September 30, 1907	39	21	60
Number who have gone out during the same period ..	25	22	47
Number on hand September 30, 1907	68	28	96

WERNLE ORPHAN HOME—RICHMOND.

Rev. A. J. Feeger, Richmond, President; F. Rogge, Dayton, Ohio, Secretary; Rev. J. Beck, Richmond, Financial Secretary.

Purpose of institution: To provide a home and Christian training for orphans.

Age of children received: Between 2 and 12 years.

Capacity: 75.

Homes are found for the children.

Real estate: 88 acres.

The work is under the auspices of the Lutheran Synod.

Territory covered: The United States.

Source of support: Free gifts from the Lutherans of the Joint Synod of Ohio, and other states.

Number of children on hand September 30, 1907..... 69

HOMES FOR THE AGED.

Avilla.—Old People's Home. This is a Catholic institution, supported by private charity and the fees of such inmates as are able to pay. It receives no support from public funds. On September 30, 1907, there were present 23 men and 18 women. Sister M. Blanka, superioress.

Cayuga.—Collett Home for Orphans and Aged Women. The Home is for the benefit of Vermillion County only, and is maintained by endowment. On September 30, 1907, there were present 1 man and 8 women. Mr. John Henderson, Quaker, is president; C. W. Ward, Newport, secretary and superintendent.

Evansville.—Little Sisters of the Poor. Nothing is received from public funds, the only means of support being free-will offerings of the people. On September 30, 1907, there were present 58 men and 50 women. A Catholic institution.

Evansville.—Rathbone Memorial Home for the Aged. This is a private home for the care of aged women, and is supported by an endowment fund. On September 30, 1907, there were 8 women in the institution. Officers: James L. Orr, president; R. K. Dunkerson, vice-president; Edward N. Viele, secretary, and Henry Reis, treasurer.

Evansville.—Home for the Friendless. The institution is supported by public charity and \$100 per month from the city. On September 30, 1907, there were in the Home 21 women and 5 babes. Mrs. L. E. DeBruler is president; Mrs. Isaac Cassellberry, vice-president; Mrs. John Hubbard, secretary, and Mrs. J. C. Wade, matron.

Evansville.—Thornton Home. A Home for disabled ministers and their widows and orphans. Maintained by the Presbyterian Church as a part of its ministerial relief work and supported by voluntary contributions and interest on endowment fund. Nothing is received from public funds. On September 30, 1907, there were 7 women and 1 man in the Home. Rev. W. J. Darby, D.D., is president; S. B. Sanson, secretary and treasurer.

Greensburg.—I. O. O. F. Home. Its means of support is a tax imposed upon each member of the Order. Nothing is received from public funds. There were present in the Home on September 30,

1907, 62 men and 34 women. Mrs. Louise Langjahr, Lebanon, is president; Mrs. Mary Smith Lewis, Greensburg, matron.

Honey Creek.—Aged Persons Home and Orphan Asylum. The purpose of the Home is to provide for and take care of poor and infirm members of the German Baptist Church of the Southern District of Indiana; also to care for orphan children of deceased members. On September 30, 1907, there were present 3 males and 7 females. Officers: D. F. Miller, Middletown; Abraham Holler, Hagerstown; I. W. Tuter, Mt. Summit, trustees; D. F. Hoover, Middletown, secretary; H. B. Martin, superintendent.

Indianapolis.—Alpha Home for Aged Colored Women. For the care of aged colored women, maintained by private contributions and \$25 per month received from the county commissioners. On September 30, 1907, there were 11 women in the institution. Mrs. Minnie Scott is president; Mrs. Roxie Bell, financial secretary; Mrs. Ella Williams, superintendent.

Indianapolis.—Home for the Aged. Maintained by private charity. The city gives \$100 per annum towards the support. On September 30, 1907, there were present in the institution 76 males and 65 females. Mother Superior of the Little Sisters of the Poor is in charge. A Catholic institution. Conditions for admission are that the applicant be destitute, be of good moral character and over sixty years of age.

Indianapolis.—Home for Friendless Women. The institution is supported by public charity, receiving \$600 from the city and \$1,000 from the county, per annum. On September 30, 1907, there were 26 women in the institution. Mrs. Horace C. Starr is president; Mrs. Charles Latham, secretary; Mrs. James McKee, corresponding secretary; Mrs. William H. Hubbard, treasurer.

Indianapolis.—The Hartwig-Kalley Home for Aged People. Located at 1248 East Washington street. This home is supported by private charity and from the fees of inmates who are able to pay. No public funds are received. There were 7 men and 12 women present on September 30, 1907. Mrs. Ella Hartwig-Kalley is president; Sarah C. Morris, secretary; Lucy E. Jones, treasurer.

Jeffersonville.—Old Ladies' Home. The institution is supported by voluntary contributions. Nothing is received from public funds. On September 30, 1907, there were 7 women in the Home. Mrs. Sarah Ransom is president; Miss Clara J. Loomis, secretary; Mrs. Sophia Seibert, treasurer.

Lafayette.—St. Anthony's Home. A Catholic institution, Sister Mary Francis, superioress. No support is received from public

funds. On September 30, 1907, there were 29 men and 23 women in the Home.

Lafayette.—The Lafayette Old People's Home. For the care of persons over sixty years of age (especially residents of Tippecanoe County), who are of good moral character and of reduced circumstances. Admission fee \$300. Persons over fifty years of age may be occasionally admitted as boarders, though not to the exclusion of applicants for admission. No public support is received. Mrs. C. B. Stuart is president; Mrs. Elizabeth Vinnege, secretary; Mrs. Bennett Taylor, treasurer. On September 30, 1907, there were 5 women in the Home.

Laporte.—Ruth C. Sabin Home. For the care of elderly ladies. Only applications from Laporte County received. Support is derived from invested means and from admission fees. On September 30, 1907, there were 24 women present. H. L. Weaver, president; Mary R. Scott, vice-president; Anna J. Crumpacker, secretary.

Logansport.—Home for the Friendless. The institution has its own income but receives \$450 from the county towards its support. On September 30, 1907, there were 11 women in the Home. Mrs. E. L. Grable is president; Mrs. John F. Troutman, secretary; Mrs. J. E. Cornwell, treasurer.

Madison.—Drusilla Home. For the care of women over sixty years of age. Applicants for admission must have been residents of Jefferson County not less than two years. Admission fee \$200. On September 30, 1907, there were 12 women in the Home. Miss D. C. Cravens is president; Mrs. Henry Edwards, secretary; Mrs. Joseph Colgate, treasurer. No public support is received.

Marion.—Emily E. Flinn Home. The institution is supported by the Twentieth Century Club, composed of widows only, the purpose being to help worthy widows and their families. On September 30, 1907, there were 16 women in the Home. An admission fee of \$50 is asked from residents of the county; \$500 from those outside the county. Mrs. N. J. Helm is president; Theresa Johnson, secretary; Bessie M. Smith, treasurer.

Mexico.—Old Folks' and Orphans' Home. The old folks' department is entirely a sectarian home, and is maintained wholly by the German Baptist Brethren Church of Middle Indiana. On September 30, 1907, there were 52 males and 30 females present. Frank Fisher, Mexico, is president; J. E. Miller, Peru, treasurer.

New Albany.—Old Ladies' Home. An endowed institution for the care of aged women. On September 30, 1907, there were 9

women in the institution. Mrs. W. S. Culbertson and Samuel Culbertson, of Louisville, Kentucky, are trustees; Miss Mary Baldwin, matron.

Richmond.—Home of the Friendless. This institution cares for the women prisoners of the county, in addition to those who are friendless. Support is derived from private contributions and forty cents per day for each prisoner received. On September 30, 1907, there were 6 women in the institution, in addition to the prisoners. Mrs. Lewis Ewing is president; Mrs. A. M. Taylor, secretary; Mrs. Charles Bell, treasurer.

Richmond.—Margaret Smith Home for Aged Women. For the care of aged and infirm women, sixty years of age and over. The institution is maintained by endowment, private contributions and admission fees. On September 30, 1907, there were 12 women in the Home. W. H. Bradbury, president; Arthur L. Smith, secretary; M. C. Price, treasurer.

HOSPITALS.

Albion.—New Hope Hospital. The institution derives its support from the income of patients, receiving nothing from public funds. John W. Morr, M. D., is president and secretary; M. C. Beck, Ed. P. Eagles, Elza Shaffer and L. H. Wrigley, directors. On September 30, 1907, there were 3 males and 2 females in the hospital.

Anderson.—St. John's Hospital. A Catholic institution in charge of the Sisters of the Cross. It is self-supporting. On September 30, 1907, there were 7 males and 6 females in the hospital, of whom 2 males and 2 females were charity patients.

Bloomington.—The Bloomington Hospital. The institution is supported by earnings and voluntary donations and also receives \$365 a year from the city. Mrs. Maude E. Showers is president; Mrs. D. M. Mottier, recording secretary; Mrs. H. T. Kitson, financial secretary; Mrs. H. C. Duncan, treasurer. On September 30, 1907, there were 2 male and 7 female patients, two of whom were charity patients.

Columbia City.—Whitley County Hospital. In charge of the County Commissioners of Whitley County in connection with the county poor asylum. The institution is supported by the county. W. H. Miner is superintendent. On September 30, 1907, there were 29 patients, 15 males and 14 females.

Columbus.—Mercy Hospital. A Catholic hospital in charge of Sister Regina, superioress. The hospital is supported from private contributions.

Crawfordsville.—L. L. Culver Union Hospital. The institution derives its support from hospital earnings, dues of members of the association and \$100 annually from the city of Crawfordsville. The officers of the hospital are Mrs. L. F. Hornady, president; A. D. Thomas, vice-president; John A. Booe, treasurer; Sara L. Cook, superintendent. On September 30, 1907, there were 11 patients in the hospital: 5 males and 6 females.

Elkhart.—Clark Hospital. The institution is self-supporting, with donations from the public. The officers of the hospital are Dr. A. L. Fisher, president; Dr. R. L. Lockwood, vice-president; Dr. I. W. Short, secretary; Dr. J. C. Fleming, treasurer. Bertha

L. Seibert is superintendent. On September 30, 1907, there were 4 patients in the hospital: 1 male and 3 females, of whom one male was a charity patient.

Evansville.—St. Mary's Hospital. The institution derives its support from the income of private patients and \$100 per month received from the city of Evansville. This is a Catholic institution, in charge of Sister Mary Joseph, Superioress. Dr. Charles M. Roberts is house physician. On September 30, 1907, there were 73 patients in the hospital: 42 males and 31 females. Ten males and 8 females were charity patients.

Evansville.—Protestant Deaconess Home and Hospital. The institution is supported by the income of patients and charitably inclined people. No public support is received. Rev. J. U. Schneider is president; Rev. F. A. Reller, vice-president; Rev. Paul Pfeiffer, officer. On September 30, 1907, there were 64 patients in the hospital: 32 males and 32 females. Four males and one female were charity patients.

Evansville.—U. S. Marine Hospital. The hospital is supported by the U. S. Government. J. B. Stoners is surgeon; W. L. Royster, assistant surgeon; E. E. Barnett, pharmacist. On September 30, 1907, there were 17 male patients, all of them charity patients.

Fort Wayne.—Hope Hospital. The institution is supported by its earnings. W. O. Gross is secretary; J. B. Franke, treasurer; E. G. Fournier, superintendent. On September 30, 1907, there were 47 patients in the hospital: 21 males and 26 females. Ten of these were charity patients.

Fort Wayne.—Lutheran Hospital. The institution is supported from the free-will offerings of the Lutheran congregations. Nothing is received from public funds. Rev. Ph. Wambsganss is president; Rev. W. Brandes, secretary; August Freese, financial secretary; Charles Pape, Sr., treasurer. On September 30, 1907, there were 55 patients in the hospital: 23 males and 32 females. Six females were charity patients.

Fort Wayne.—St. Joseph's Hospital. In charge of Ven. Mother M. Secunda, Superioress. The institution is supported from the earnings of patients. On September 30, 1907, there were 61 patients in the hospital: 25 males and 36 females. Sixteen of these were charity patients.

Fort Wayne.—St. Rochus Sanitarium. In charge of Ven. Mother M. Secunda, Superioress. The institution derives its support from the earnings of patients. On September 30, 1907, there were 7 patients in the hospital: 2 males and 5 females.

Garrett.—Sacred Heart Hospital. Conducted by and in charge of the Franciscan Sisters of the Sacred Heart. Sister M. Paulina, Superioress. The hospital derives its support from fees and is self-supporting. On September 30, 1907, there were in the hospital 24 patients: 19 males and 5 females. Three males and two females were charity patients.

Hammond.—St. Margaret's Hospital. No support is received from public funds, the hospital being maintained partly by charity and by patients who are able to pay. The institution is in charge of the Franciscan Sisters of the Catholic Church. Sister M. Eusebia is Superioress. On September 30, 1907, there were 64 patients in the hospital: 46 males and 18 females. Of these 10 females and 20 males were charity patients.

Huntington.—Huntington Hospital. The hospital is self-supporting but receives occasional charity contributions for individual cases. H. K. McIlvaine, M. D., is owner and manager. On September 30, 1907, there were 8 patients in the hospital: 3 males and 5 females. Two of these were charity patients.

Indianapolis.—City Hospital. Supported by the City of Indianapolis. Dr. J. L. Freeland, Superintendent. On September 30, 1907, there were 137 patients in the hospital: 75 males and 62 females.

Indianapolis.—Protestant Deaconess Hospital and Home for Aged. The institution is self-supporting. Henry Vitz is president; John Aldag, treasurer; Henry Russe, superintendent. On September 30, 1907, there were 70 patients in the hospital: 27 males and 43 females. There have been 50 charity patients during the year.

Indianapolis.—Methodist Episcopal Hospital and Deaconess Home. In course of construction. Rev. C. E. Bacon, president; F. A. Steele, secretary; W. D. Cooper, treasurer.

Indianapolis.—Flower Mission Eleanor Hospital for Children. The institution derives its support from the Flower Mission, endowment of beds and a few pay patients. Mrs. William L. Elder is president; Mrs. Albert Baker, secretary; Miss Mary Knippenberg, treasurer. On September 30, 1907, there were 16 patients in the hospital: 9 boys and 7 girls.

Indianapolis.—Flower Mission Hospital for Incurables. This hospital derives its support from the City Hospital appropriation and is located adjoining the City Hospital. Mrs. James H. Lowes, Mrs. Lavalette D. Dickey, Mrs. Charles R. Williams and Mrs. George T. Evans are officers. The hospital has twenty-four beds

and ordinarily all are filled. On September 30, 1907, there were 16 patients: 9 males and 7 females.

Indianapolis.—St. Vincent's Infirmary. A Catholic institution in charge of Sister Madeleine. The hospital is supported from the income of patients and \$300 annually from the city of Indianapolis. On September 30, 1907, there were 85 patients: 35 males and 50 females. Seven males and nine females were charity patients.

Indianapolis.—Free Dispensaries are operated as follows: City Dispensary, southeast corner of Alabama and Pearl Streets; Bobbs' Free Dispensary of the Medical College of Indiana, No. 104 North Senate Avenue; Free Dispensary of the College of Physicians and Surgeons, 214 North Senate Avenue; Physio-Medical College Free Dispensary, southeast corner College Avenue and 15th Street.

Jeffersonville.—Mercy Hospital. A Catholic institution in charge of Mother Mary Regina, superioress. The hospital derives its support from the earnings of patients. No public support is received.

Jeffersonville.—Deaconess Hospital. The institution is self-supporting. John Rauchenberger is president; Jacob Schwaninger, vice-president; J. A. Graham, treasurer. Miss Marilla Williams is superintendent. On September 30, 1907, there were 10 patients in the hospital: 5 males and 5 females.

Lafayette.—St. Elizabeth's Hospital. A Catholic institution in charge of Sister M. Bernarda, superioress. The hospital derives its support from pay patients and charitable contributions. No support is received from public funds. On September 30, 1907, there were 76 patients in the hospital: 43 males and 33 females. Forty of these were charity patients.

Lafayette.—Home Hospital. The institution derives its support from pay patients and membership fees. Donations are also received, but no public support is received. Warren W. Lane is president; F. E. Dorner, secretary; T. G. Rainey, treasurer. On September 30, 1907, there were 23 patients in the hospital: 8 males and 15 females. Two males and three females were charity patients.

Laporte.—Holy Family Hospital. A Catholic institution in charge of Sister M. Helena, superioress. The institution is supported by the earnings of patients and receives some donations. On September 30, 1907, there were 15 patients in the hospital: 7 males and 8 females. Of these, three males and three females were charity patients.

Logansport.—St. Joseph's Hospital. A Catholic hospital under

the charge of Vên. Sister M. Josepha, superioress. The hospital receives \$250 per year from the city of Logansport and \$500 per year from the county. On September 30, 1907, there were 12 patients in the hospital: 8 males and 4 females.

Madison.—The King's Daughters Hospital. The hospital receives its support from voluntary donations and \$25 per month from the city of Madison. Mrs. Elmer Scott is president; Mrs. John Zuck, treasurer; Miss Clara Schmidt, secretary. On September 30, 1907, there were 4 patients in the hospital: 1 male and 3 females.

Marion.—Marion Hospital. The hospital is supported by private capital. Glen D. Kimball is manager. The city pays for one bed in the hospital. On September 30, 1907, there were 18 patients in the hospital: 8 males and 10 females. One of these was a charity patient.

Michigan City.—St. Anthony's Hospital. A Catholic institution in charge of Sister Mary Euphrosina, superioress. The institution derives its support from alms and fees of private patients. No public support is received. On September 30, 1907, there were 35 patients in the hospital: 20 males and 15 females. Eight males and eleven females were charity patients.

Muncie.—The Muncie Hospital. The hospital derives its support from private funds and an annual donation from the city of Muncie. Dr. W. D. Whitney is superintendent; Dr. E. A. Whitney, matron. On September 30, 1907, there were two male patients in the hospital.

New Albany.—St. Edward's Hospital. A Catholic institution in charge of Sister Superior. The hospital derives its support from charity and public funds. Floyd County annually contributes \$1,500. On September 30, 1907, there were 63 patients in the hospital: 31 males and 32 females. Of these, 14 males and 17 females were charity patients.

Peru.—Wabash Employes' Hospital Association. The institution derives its support from contributions by employes of the Wabash Railroad. Henry Miller is vice-president and general manager. Dr. E. H. Griswold is Surgeon in Charge.

Portland.—The Jay County Hospital. The hospital is nearly self-supporting. The county contributed \$500 last year toward its support, but nothing has been received from it this year. Mrs. E. E. McGriff is president; Frank White, vice-president; C. W. McLaughlin, secretary; Mrs. W. D. Yount, treasurer. Mrs. Jason Henley is superintendent of the Charity Ward. On September 30,

1907, there were 6 patients in the hospital: 2 males and 4 females. Two females were charity patients.

Richmond.—Reid Memorial Hospital. The institution derives its support from the interest on endowment fund and fees from private patients. The city of Richmond contributes \$6,000 per annum. John L. Rupe is president; John H. Johnson, secretary; Adam H. Bartel, treasurer. Miss Alice Ashby is superintendent. On September 30, 1907, there were 19 patients in the hospital: 9 males and 10 females. Five of these were charity patients.

Rome City.—Kneipp Sanitarium. A Catholic institution in charge of Sister Margaret. The hospital derives its support from the income of patients. No public support is received. On September 30, 1907, there were 48 patients in the hospital: 20 males and 28 females. Of these, 5 males and 9 females were charity patients.

South Bend.—Epworth Hospital. The hospital is supported from general fees and private subscriptions. Mrs. George M. Studabaker is president; Mrs. Laura De Rhodes, secretary; Mrs. C. Haeske, treasurer. On September 30, 1907, there were 40 patients in the hospital: 21 males and 19 females. Of these, one male was a charity patient.

South Bend.—St. Joseph's Hospital. A Catholic institution under the Sisters of the Holy Cross. The institution derives its support from the fees of patients. On September 30, 1907, there were 50 patients in the hospital.

Terre Haute.—Rose Dispensary. The hospital is supported by an endowment from Chauncy Rose, the original endowment being \$75,000. No public support is received. Medicine and medical advice is furnished free. J. W. Cruft is president; B. V. Marshall, secretary; S. C. McKeen, treasurer.

Terre Haute.—St. Anthony's Hospital. A Catholic institution in charge of Sister M. Augustina. The hospital derives its support from alms and private patients and \$100 monthly from the city and \$50 annually from the county. On September 30, 1907, there were 105 patients in the hospital: 65 males and 40 females. Of these, 26 males and 19 females were charity patients.

Terre Haute.—Union Hospital. The institution derives its support from voluntary contributions and \$50 monthly from the city and \$100 monthly from the county. Mrs. E. F. Williams is president; Miss Helen Condit, secretary; Mr. N. Smith, treasurer. On September 30, 1907, there were 15 patients in the hospital: 4 males and 11 females. Two males were charity patients.

Valparaiso.—Christian Hospital and Training School for Nurses. The institution derives its support from pay patients and donations. H. B. Brown is president; John L. Jones, treasurer; John Roessler, manager. On September 30, 1907, there were 3 patients in the hospital: 2 males and 1 female.

Vincennes.—The Good Samaritan Hospital of Vincennes and Knox County. The institution is in course of construction. James W. Emison is president; Mrs. O. H. Cobb, secretary.

Wabash.—Wabash County Hospital. The hospital is supported by private donations and receipts from patients. John Lewis is president; Mrs. R. Clark, secretary; Thomas McName, treasurer. Helen McDougal is superintendent and manager. On September 30, 1907, there were 7 patients in the hospital: 2 males and 5 females.

TRUSTEES AND SUPERINTENDENTS OF THE STATE INSTITUTIONS.

CENTRAL HOSPITAL FOR INSANE, INDIANAPOLIS.

First Appointment.		Term Expires.
1902.	Eli Marvin, Frankfort.....	January 1, 1908
1904.	D. H. Davis, Knightsville.....	January 1, 1909
1907.	Thomas A. Clifton, Covington.....	January 1, 1910
1907.	Adam Heimberger, New Albany.....	April 10, 1911
1893.	Dr. George F. Edenharter, Superintendent.	

NORTHERN HOSPITAL FOR INSANE, LOGANSPORT.

1902.	Henry A. Barnhart, Rochester.....	January 1, 1908
1903.	Warren T. McCray, Kentland.....	January 1, 1909
1897.	Charles W. Slick, Mishawaka.....	January 1, 1910
1907.	William A. Morris, Frankfort.....	April 10, 1911
1888.	Dr. Joseph G. Rogers, Superintendent.	

EASTERN HOSPITAL FOR INSANE, RICHMOND.

1905.	John W. Hanan, Lagrange.....	January 1, 1908
1906.	Jos. L. Cowing, Rushville.....	January 1, 1909
1906.	John Detamore, Portland.....	January 1, 1910
1907.	Edward Barrett, Plainfield.....	May 6, 1911
1891.	Dr. S. E. Smith, Superintendent.	

SOUTHERN HOSPITAL FOR INSANE, EVANSVILLE.

1906.	Fred F. Bays, Sullivan.....	January 1, 1908
1905.	John T. Stout, Paoli.....	January 1, 1909
1907.	Wm. S. Bogy, Bloomfield.....	May 6, 1911
1907.	Bird H. Davis, Newport.....	May 6, 1911
1903.	Dr. Charles E. Laughlin, Superintendent.	

SOLDIERS' HOME, LAFAYETTE.

1901.	W. S. Haggard, Lafayette.....	February 25, 1908
1903.	Eli F. Ritter, Indianapolis.....	February 25, 1909
1906.	John W. Rinear, Liberty Center.....	February 25, 1909
1901.	Louis B. Fulwiler, Peru.....	February 25, 1911
1903.	Richard M. Smock, Commandant.	

SOLDIERS' AND SAILORS' ORPHANS' HOME, KNIGHTSTOWN.

First Appointment.		Term Expires.
1905.	Hugh Daugherty, Indianapolis.....	March 23, 1909
1905.	George W. Duncan, Greenfield.....	March 23, 1909
1907.	Laura A. Cumback, Greensburg.....	September 7, 1911
1907.	Luther Short, Franklin.....	September 7, 1911
1891.	A. H. Graham, Superintendent.	

INDIANA STATE SCHOOL FOR DEAF, INDIANAPOLIS.

1902.	Wm. P. Herron, Crawfordsville.....	January 1, 1908
1904.	H. B. Brown, Valparaiso.....	January 1, 1909
1901.	Wm. W. Ross, Evansville.....	January 1, 1911
1907.	Ele Stansbury, Williamsport.....	April 10, 1911
1889.	Richard O. Johnson, Superintendent.	

INDIANA SCHOOL FOR BLIND, INDIANAPOLIS.

1902.	A. C. Pilkenton, Greenfield.....	January 1, 1908
1906.	Louis Dunlap, Covington.....	January 1, 1909
1893.	John F. Hennessey, Indianapolis.....	January 1, 1910
1907.	Friend F. Wiley, Edinburg.....	May 6, 1911
1898.	George S. Wilson, Superintendent.	

SCHOOL FOR FEEBLE-MINDED YOUTH, FORT WAYNE.

1897.	Mrs. Mary R. Harper, Fort Wayne.....	March 10, 1909
1901.	Edward M. Wilson, Fort Wayne.....	March 10, 1909
1903.	James W. Sale, Bluffton.....	May 6, 1911
1907.	Albert P. Sinclair, Cloverdale.....	May 6, 1911
1903.	A. E. Carroll, Superintendent.	

VILLAGE FOR EPILEPTICS, NEW CASTLE.

1906.	Enoch G. Hogate, Bloomington.....	March 15, 1908
1906.	Silas W. Hale, Geneva.....	March 15, 1909
1907.	George Nichol, Anderson.....	March 15, 1910
1907.	Oliver L. Nash, Rushville.....	June 25, 1911
1906.	Dr. W. C. Van Nuys, Superintendent.	

STATE PRISON, MICHIGAN CITY.

First Appoint- ment.		Term Expires.
1905.	David A. Coulter, Frankfort.....	January 1, 1908
1902.	Patrick O'Brien, South Bend.....	January 1, 1909
1907.	Herbert R. Koffel, Knox.....	January 1, 1910
1907.	Michael E. Foley, Crawfordsville.....	May 6, 1911
1901.	James D. Reid, Warden.	

INDIANA REFORMATORY, JEFFERSONVILLE.

1897.	D. J. Terhune, Linton.....	March 22, 1908
1905.	W. H. Hart, Indianapolis.....	March 22, 1909
1905.	Thomas B. Orr, Anderson.....	March 22, 1910
1907.	Wm. D. Allison, Indianapolis.....	March 22, 1911
1903.	Will H. Whittaker, Superintendent.	

INDIANA BOYS' SCHOOL, PLAINFIELD.

1901.	Wm. C. Van Arsdel, Indianapolis.....	March 1, 1909
1891.	Wm. C. Ball, Terre Haute.....	April 10, 1911
1907.	Theodore P. Johnson, Lochiel.....	April 10, 1911
1907.	Guy H. Humphreys, Bloomfield.....	April 10, 1911
1901.	Eugene E. York, Superintendent.	

INDIANA GIRLS' SCHOOL, CLERMONT.

1907.	Mrs. Lottie White Caldwell, Lafayette.....	April 1, 1908
1907.	Mrs. Isabel J. Bell, Kokomo.....	April 1, 1909
1907.	Mrs. Sarah Tarney Campbell, Anderson....	April 1, 1910
1907.	Mrs. Emma Lee Elam, Indianapolis.....	April 1, 1911
1907.	Miss Sarah L. Montgomery, Superintendent.	

INDIANA WOMAN'S PRISON.

1903.	Mrs. Ella B. McCoy, Indianapolis.....	April 10, 1911
1907.	Mrs. Nettie Adams Wilson, Lafayette.....	April 10, 1911
1907.	Mrs. Alice C. Waugh, Tipton.....	April 10, 1911
1907.	Mrs. Fannie McKinney McKee, Indianapolis.	April 10, 1911
1901.	Miss Emily E. Rhoades, Superintendent.	

COMMISSIONS.

SOUTHEASTERN HOSPITAL FOR INSANE.

First Appoint- ment.		Term Expires.
	Hon. J. Frank Hanly, Ex Officio.	
1905.	George A. H. Shideler, Marion.....	April 21, 1908
1905.	Eph. Inman, Washington.....	April 21, 1908
1905.	Duane D. Jacobs, Lafayette.....	April 21, 1908
1907.	Walter H. Lewis, Pendleton.....	April 21, 1908

TUBERCULOSIS.

J. N. Babcock, Topeka.
 Dr. Henry Moore, Indianapolis.
 Benjamin F. Bennett, Greensburg.
 Isaac R. Strouse, Rockville.
 W. S. Holman, Aurora.

FINANCIAL EXHIBIT OF THE BOARD OF STATE CHARITIES.

NOVEMBER 1, 1906, TO SEPTEMBER 30, 1907.

1906.			
November 1.....	By appropriation.....	\$8,000 00	\$7,333 33
	Less $\frac{1}{2}$ due to change in fiscal year.....	666 67	
November 30.....	To warrant from Auditor.....	\$492 04	
December 31.....	To warrant from Auditor.....	438 02	
1907.			
January 31.....	To warrant from Auditor.....	546 65	
February 28.....	To warrant from Auditor.....	471 11	
March 31.....	To warrant from Auditor.....	489 53	
April 30.....	To warrant from Auditor.....	496 82	
May 31.....	To warrant from Auditor.....	691 59	
June 30.....	To warrant from Auditor.....	646 38	
July 31.....	To warrant from Auditor.....	730 46	
August 31.....	To warrant from Auditor.....	746 82	
September 30.....	To warrant from Auditor.....	1,564 67	
Total.....			\$7,314 10
Balance reverting to State Treasury.....			\$19 23

EXPENDITURES.

1906.			
November 30..	Salaries:		
	Secretary.....	\$208 33	\$379 33
	Clerks.....	171 00	
	Members' traveling expenses:		
	William P. Cooper.....	\$9 30	18 71
	Carrie Goodwin Rexford.....	1 70	
	Sarah Stockton.....	50	
	Sydney B. Davis.....	7 21	
	Secretary's traveling expenses:		29 20
	Hotel.....	\$4 50	
	Railroad.....	23 35	
	Conveyance.....	85	
	Telegraph and telephone.....	50	5 00
	William B. Burford:		
	Stationery and office supplies.....	\$5 00	
	Postage.....		50 00
	Library account:		8 00
	Newspapers.....	\$5 00	
	Books.....	3 00	
	Office expenses:		1 80
	Express.....	\$0 30	
	Miscellaneous.....	1 50	
December 31..	Salaries:		\$492 01
	Secretary.....	\$208 34	\$379 34
	Clerks.....	171 00	

EXPENDITURES—Continued.

December 31..	Secretary's traveling expenses:			
	Hotel.....	\$6 45		
	Railroad.....	33 84		
	Conveyance.....	3 90		
	Telegraph and telephone.....	3 21		
			\$47 50	
	Library account:			
	Clippings.....	\$5 00		
	Dues, National Association for Study of Epilepsy.....	5 00		
			10 00	
	Office expenses:			
	Express.....	\$0 23		
	Telegraph and telephone.....	95		
			1 18	
				\$438 02
1907.				
January 31....	Salaries:			
	Secretary.....	\$208 33		
	Clerks.....	171 00		
			\$379-33	
	Secretary's traveling expenses:			
	Hotel.....	\$3 70		
	Railroad.....	13 15		
	Conveyance.....	70		
	Telegraph and telephone.....	1 91		
			19 46	
	William B. Burford:			
	Stationery and office supplies.....		9 23	
	Office expenses:			
	Telegraph and telephone.....	\$17 80		
	Typewriter repairs.....	2 25		
	Railroad guide.....	1 50		
	Express.....	83		
			22 38	
	Library account:			
	Clippings.....	\$10 00		
	Fifty Volumes Proceedings National Conference Charities and Correction, 1906.....	56 25		
			66 25	
	Postage.....		50 00	
				546 65
February 28....	Salaries:			
	Secretary.....	\$208 33		
	Clerks.....	171 00		
			\$379 33	
	Members' traveling expenses:			
	Timothy Nicholson.....		11 80	
	Secretary's traveling expenses:			
	Hotel.....	\$1 50		
	Railroad.....	55		
	Conveyance.....	35		
	Telegraph and telephone.....	81		
			3 21	
	William B. Burford:			
	Stationery and office supplies.....	\$26 24		
	Printing.....	3 37		
			29 61	
	Library account:			
	Seven subscriptions to "Charities and the Commons".....		14 00	
	Office expenses:			
	Drayage.....	\$3 20		
	Express.....	89		
	Telegraph and telephone.....	7 35		
			11 44	
	Postage.....		21 72	
				471 11
March 31.....	Salaries:			
	Secretary.....	\$208 34		
	Clerks.....	200 00		
			\$408 34	
	Members' traveling expenses:			
	Carrie Goodwin Rexford.....		9 70	

EXPENDITURES—Continued.

March 31.....	Secretary's traveling expenses:				
	Hotel.....	\$3	35		
	Railroad.....	9	90		
	Conveyance.....	2	30		
	Telegraph and telephone.....		25		
				\$15	80
	William B. Burford:				
	Stationery and office supplies.....			20	00
	Office expenses:				
	Binding books.....	\$13	50		
	Expres.....		99		
	Typewriter supplies.....	3	50		
	Postal guide.....	2	00		
	Telegraph and telephone.....	5	10		
				25	09
	Library account:				
	Magazines.....	30	60		
	Clippings.....	10	00		
				10	60
					\$489 53
April 30.....	Salaries:				
	Secretary.....	\$208	34		
	Clerks.....	200	00		
				\$408	34
	Members' traveling expenses:				
	Carrie Goodwin Rexford.....			19	10
	Secretary's traveling expenses:				
	Hotel.....	\$18	05		
	Railroad.....	4	75		
	Conveyance.....		90		
	Telegraph and telephone.....	3	03		
				26	73
	William B. Burford:				
	Stationery and office supplies.....			16	41
	Office expenses:				
	Telegraph and telephone.....	\$16	10		
	Drayage.....		90		
				17	00
	Postage.....			9	25
					496 82
May 31.....	Salaries:				
	Secretary.....	\$250	00		
	Clerks.....	200	00		
				\$450	00
	Members' traveling expenses:				
	William P. Cooper.....	\$18	12		
	Timothy Nicholson.....	10	44		
				28	56
	Secretary's traveling expenses:				
	Hotel.....	\$5	80		
	Railroad.....	12	00		
	Conveyance.....		80		
	Telegraph and telephone.....		56		
				19	16
	Office expenses:				
	Rent of adding machine.....	\$10	00		
	Telephone.....	3	15		
				13	15
	Library account:				
	Books.....			5	00
	William B. Burford:				
	Stationery and office supplies.....	\$64	70		
	Printing.....	111	02		
				175	72
					691 59
June 30.....	Salaries:				
	Secretary.....	\$250	00		
	Clerks.....	200	00		
				\$450	00
	Members' traveling expenses:				
	Carrie Goodwin Rexford.....	\$75	40		
	Sarah Stockton.....	53	45		
				128	85

EXPENDITURES—Continued.

June 30.....	Secretary's traveling expenses:				
	Hotel.....	\$5 65			
	Railroad.....	45 58			
	Conveyance.....	4 95			
	Telegraph and telephone.....	1 71			
			\$57 89		
	Office expenses:				
	Telephone and telegraph.....	\$5 93			
	Express.....	2 96			
	Drayage.....	25		9 14	
	Library account:				
	Newspapers.....		50		
					\$646 38
July 31.....	Salaries:				
	Secretary.....	\$250 00			
	Clerks.....	200 00			
			\$450 00		
	Members' traveling expenses:				
	Timothy Nicholson.....	\$19 22			
	Carrie Goodwin Rexford.....	16 89		36 11	
	Secretary's traveling expenses:				
	Hotel.....	\$11 90			
	Railroad.....	8 51			
	Conveyance.....	5 25			
	Telegraph and telephone.....	1 50		27 16	
	William B. Burford:				
	Stationery and office supplies.....	\$67 45			
	Printing.....	71 20		138 65	
	Postage.....		53 57		
	Office expenses:				
	Telegraph and telephone.....	\$16 70			
	Express.....	1 27			
	Drayage.....	2 50			
	Miscellaneous.....	50		20 97	
	Library account:				
	Books.....	1 50			
	Magazines.....	2 50		4 00	
					730 46
August 31.....	Salaries:				
	Secretary.....	\$250 00			
	Clerks.....	209 25			
			\$459 25		
	Members' traveling expenses:				
	William P. Cooper.....	\$15 48			
	Timothy Nicholson.....	12 83			
	Sydney B. Davis.....	12 31			
	Carrie Goodwin Rexford.....	13 80		54 42	
	Secretary's traveling expenses:				
	Hotel.....	\$12 35			
	Railroad.....	45 60			
	Conveyance.....	2 55			
	Telegraph and telephone.....	1 27		61 77	
	William B. Burford:				
	Stationery and office supplies.....	\$23 84			
	Postage.....	40 00			
	Printing.....	11 00		74 84	
	Office expenses:				
	Telegraph and telephone.....	\$5 45			
	Filing boxes.....	13 00			
	Express.....	1 10		19 55	
	Library account:				
	Magazine.....		2 00		
	Postage.....		75 00		
					746 38
September 30..	Salaries:				
	Secretary.....	\$250 00			
	Clerks.....	226 00			
			\$476 00		

EXPENDITURES—Continued.

September 30..	Members' traveling expenses:			
	Demarchus C. Brown.....	\$0 30		
	William P. Cooper.....	20 25		
	Carrie Goodwin Rexford.....	56 07		
			\$76 62	
	Secretary's traveling expenses:			
	Hotel.....	\$4 15		
	Railroad.....	46 39		
	Conveyance.....	2 75		
	Telegraph and telephone.....	52		
			53 81	
	Office expenses:			
	Office chair.....	\$9 50		
	Typewriter chair.....	7 00		
	Filing cabinet.....	8 00		
	Express.....	2 62		
	Telegraph and telephone.....	20 75		
	Typewriter supplies.....	5 50		
	Adding machine.....	350 00		
			403 37	
	William B. Burford:			
	Stationery and office supplies.....	\$202 77		
	Printing.....	77 45		
			280 22	
	Library account:			
	Binding books.....	12 60		
	National Conference guide and index.....	3 00		
	Reprints.....	9 05		
			24 65	
	Postage.....		250 00	
				\$1,564 67
				\$7,214 10

RECAPITULATION.

Salaries:			
Secretary.....	\$2,500 00		
Clerks.....	2,119 25		
		\$4,619 25	
Members' traveling expenses:			
Demarchus C. Brown.....	\$0 30		
William P. Cooper.....	63 15		
Sydney B. Davis.....	19 52		
Timothy Nicholson.....	54 29		
Carrie Goodwin Rexford.....	192 66		
Sarah Stockton, M. D.....	53 95		
		383 87	
Secretary's traveling expenses:			
Hotel.....	\$77 40		
Railroad.....	243 62		
Conveyance.....	25 30		
Telegraph and telephone.....	15 37		
		361 69	
Stationery and office supplies.....		435 64	
Printing.....		274 04	
Postage.....		549 54	
Office expenses:			
Telegraph and telephone.....	\$99 28		
Express.....	11 19		
Drayage.....	6 85		
Typewriter supplies and repairs.....	11 25		
Office chairs.....	16 50		
Railroad guide.....	1 50		
Postal guide.....	2 30		
Rent of adding machine.....	10 62		
Adding machine.....	350 00		
Filing boxes and cabinet.....	21 90		
Miscellaneous.....	15 50		
		546 07	

RECAPITULATION—Continued.

Library account:			
Books.....	\$8 00		
Magazines.....	19 10		
Newspapers.....	7 0		
Clippings.....	25 00		
Dues National Association for Study of Epilepsy.....	5 00		
Publications—National Conference of Charities.....	59 25		
Binding books.....	12 60		
Reprints.....	9 05		
		\$145 00	
One-twelfth reduction in appropriation due to change in fiscal year.....			\$7,314 10
Balance reverting to General Fund.....			666 67
			19 23
Total.....			\$8,000 00

FINANCIAL EXHIBIT OF THE BOARD OF STATE CHARITIES—STATE AGENCY.

NOVEMBER 1, 1906, TO SEPTEMBER 30, 1907.

1906.			
November 1.	By appropriation.....	\$8,000 00	
	Less $\frac{1}{2}$ due to change in fiscal year.....	666 67	
			\$7,333 33
November 30.	To warrant from Auditor.....	\$702 99	
December 31.	To warrant from Auditor.....	610 90	
1907.			
January 31.	To warrant from Auditor.....	606 90	
February 28.	To warrant from Auditor.....	653 54	
March 31.	To warrant from Auditor.....	626 55	
April 30.	To warrant from Auditor.....	698 76	
May 31.	To warrant from Auditor.....	690 24	
June 30.	To warrant from Auditor.....	622 44	
July 31.	To warrant from Auditor.....	661 88	
August 31.	To warrant from Auditor.....	614 41	
September 30.	To warrant from Auditor.....	816 16	
	Total.....		\$7,304 77
	Balance reverting to State Treasury.....		\$28 56

EXPENDITURES.

1906			
November 30.	Salaries.....	\$280 00	
	Traveling expenses.		
	Perry N. Hise—		
	Hotel.....	\$11 30	
	Railroad.....	25 30	
	Conveyance.....	5 70	
	Telegraph and telephone.....	25	
			42 55
	Mark A. Smith—		
	Hotel.....	\$34 75	
	Railroad.....	42 19	
	Conveyance.....	34 45	
			111 39
	Mary Carmichael—		
	Hotel.....	\$44 20	
	Railroad.....	20 75	
	Conveyance.....	51 95	
	Telegraph and telephone.....	45	
			117 35
	Leila M. Thomas—		
	Hotel.....	\$30 10	
	Railroad.....	29 65	
	Conveyance.....	39 60	
	Telegraph and telephone.....	60	
			99 95
	Clerk's salary.....	50 00	
	Office expenses.....	1 75	
			\$702 99

EXPENDITURES—Continued.

December 31..	Salaries.....		\$280 00	
	Traveling expenses:			
	Perry N. Hiser—			
	Hotel.....	\$21 60		
	Railroad.....	23 80		
	Conveyance.....	21 60		
	Telegraph and telephone.....	1 75		
			68 75	
	Mark A. Smith—			
	Hotel.....	\$38 00		
	Railroad.....	21 35		
	Conveyance.....	23 95		
			83 30	
	Mary Carmichael—			
	Hotel.....	\$33 00		
	Railroad.....	2 45		
	Conveyance.....	34 95		
			70 40	
	Leila M. Thomas—			
	Hotel.....	\$19 70		
	Railroad.....	8 55		
	Conveyance.....	28 05		
			56 30	
	Clerk's salary.....		50 00	
	Office expenses.....		2 15	
1907.				\$610 90
January 31...	Salaries.....		\$280 00	
	Traveling expenses:			
	Perry N. Hiser—			
	Hotel.....	\$10 10		
	Railroad.....	21 65		
	Conveyance.....	3 75		
	Telegraph and telephone.....	25		
			35 75	
	Mark A. Smith—			
	Hotel.....	\$32 00		
	Railroad.....	20 00		
	Conveyance.....	26 50		
			78 00	
	Mary Carmichael—			
	Hotel.....	\$35 25		
	Railroad.....	20 50		
	Conveyance.....	37 20		
	Telegraph and telephone.....	40		
			93 35	
	Leila M. Thomas—			
	Hotel.....	\$0 20		
	Railroad.....	85		
	Conveyance.....	56 50		
			57 55	
	Clerk's salary.....		50 00	
	Office expenses.....		12 25	
				606 90
February 28...	Salaries.....		\$280 00	
	Traveling expenses:			
	Perry N. Hiser—			
	Hotel.....	\$9 65		
	Railroad.....	30 85		
	Conveyance.....	3 25		
			43 75	
	Mark A. Smith—			
	Hotel.....	\$35 50		
	Railroad.....	42 50		
	Conveyance.....	27 60		
			105 60	
	Mary Carmichael—			
	Hotel.....	\$20 20		
	Railroad.....	22 05		
	Conveyance.....	20 00		
	Telegraph and telephone.....	25		
			62 50	

EXPENDITURES—Continued.

February 28...	Traveling expenses: Leila M. Thomas— Hotel..... \$16 85 Railroad..... 26 25 Conveyance..... 24 80 Clerk's salary..... Office expense..... William B. Burford: Stationery and printing.....	\$87 90 50 00 85 42 94	
			\$653 54
March 31.....	Salaries..... Traveling expenses: Perry N. Hiser— Hotel..... \$14 15 Railroad..... 39 00 Conveyance..... 1 75 Telegraph and telephone..... 25 Mark A. Smith— Hotel..... \$34 00 Railroad..... 23 25 Conveyance..... 30 95 Telegraph and telephone..... 25 Mary Carmichael— Hotel..... \$29 95 Railroad..... 21 65 Conveyance..... 27 35 Telegraph and telephone..... 1 10 Leila M. Thomas— Hotel..... \$21 70 Railroad..... 28 50 Conveyance..... 18 85 Clerk's salary..... Office expenses.....	\$280 00 55 15 88 45 80 05 69 05 50 00 3 85	
0.....	Salaries..... Traveling expenses: Perry N. Hiser— Hotel..... \$21 40 Railroad..... 24 75 Conveyance..... 4 10 Telegraph and telephone..... 25 Mark A. Smith— Hotel..... \$42 75 Railroad..... 31 09 Conveyance..... 33 20 Mary Carmichael— Hotel..... \$34 20 Railroad..... 23 15 Conveyance..... 25 40 Telegraph and telephone..... 25 Leila M. Thomas— Hotel..... \$28 15 Railroad..... 26 13 Conveyance..... 24 80 Telegraph and telephone..... 10 Clerk's salary..... Office expenses..... William B. Burford: Stationery and printing.....	\$280 00 50 50 108 04 83 00 79 18 50 00 11 70 36 34	626 55 698 76

EXPENDITURES—Continued.

May 31.....	Salaries.....	\$280 00	
	Traveling expenses:		
	Perry N. Hiser—		
	Hotel.....	\$24 50	
	Railroad.....	39 93	
	Conveyance.....	10 05	
	Telegraph and telephone.....	50	
		74 98	
	Mark A. Smith—		
	Hotel.....	\$37 90	
	Railroad.....	29 78	
	Conveyance.....	37 70	
		105 38	
	Mary Carmichael—		
	Hotel.....	\$26 20	
	Railroad.....	24 05	
	Conveyance.....	19 05	
		69 30	
	Leila M. Thomas—		
	Hotel.....	\$ 26 35	
	Railroad.....	7 12	
	Conveyance.....	23 05	
	Telegraph and telephone.....	55	
		57 07	
	Clerk's salary.....	50 00	
	Office expenses.....	5 95	
	William B. Burford:		
	Stationery and printing.....	47 56	
			\$690 24
June 30.....	Salaries.....	\$280 00	
	Traveling expenses:		
	Perry N. Hiser—		
	Hotel.....	\$16 35	
	Railroad.....	32 57	
	Conveyance.....	3 00	
		51 92	
	Mark A. Smith—		
	Hotel.....	\$37 50	
	Railroad.....	28 43	
	Conveyance.....	33 85	
		99 78	
	Mary Carmichael—		
	Hotel.....	\$40 20	
	Railroad.....	6 30	
	Conveyance.....	35 20	
	Telegraph and telephone.....	10	
		81 80	
	Leila M. Thomas—		
	Hotel.....	\$18 05	
	Railroad.....	16 59	
	Conveyance.....	24 00	
		58 64	
	Clerk' salary.....	50 00	
	Office expenses.....	30	
			622 44
July 31.....	Salaries.....	\$269 30	
	Traveling expenses:		
	Perry N. Hiser—		
	Hotel.....	\$22 60	
	Railroad.....	23 75	
	Conveyance.....	12 85	
		59 20	
	Mark A. Smith—		
	Hotel.....	\$40 00	
	Railroad.....	34 86	
	Conveyance.....	35 00	
	Telegraph and telephone.....	50	
		109 86	
	Mary Carmichael—		
	Hotel.....	\$35 75	
	Railroad.....	27 27	
	Conveyance.....	38 00	
	Telegraph and telephone.....	30	
		101 32	

EXPENDITURES—Continued.

July 31	Traveling expenses:				
	Leila M. Thomas—				
	Hotel	\$20 25			
	Railroad	19 15			
	Conveyance	20 80			
	Telegraph and telephone	20			
			\$60 40		
	Clerk's salary		50 00		
	Office expenses		11 80		
				\$661 88	
August 21	Salaries		\$280 00		
	Traveling expenses:				
	Perry N. Hiser—				
	Hotel	\$19 75			
	Railroad	4 27			
	Conveyance	13 05			
	Telegraph and telephone	25			
			37 32		
	Mark A. Smith—				
	Hotel	\$23 50			
	Railroad	23 23			
	Conveyance	24 50			
			71 23		
	Mary Carmichael—				
	Hotel	\$18 15			
	Railroad	25 81			
	Conveyance	17 25			
	Telegraph and telephone	25			
			61 46		
	Leila M. Thomas—				
	Hotel	\$41 05			
	Railroad	17 85			
	Conveyance	35 45			
	Telegraph and telephone	25			
			94 60		
	Clerk's salary		50 00		
	Office expenses		3 60		
	William B. Burford:				
	Stationery and printing		16 20		614 41
September 30 ..	Salaries		\$280 00		
	Traveling expenses:				
	Perry N. Hiser—				
	Hotel	\$21 25			
	Railroad	25 22			
	Conveyance	11 90			
	Telegraph and telephone	50			
			58 87		
	Mark A. Smith—				
	Hotel	\$37 00			
	Railroad	41 32			
	Conveyance	37 95			
	Telegraph and telephone	15			
			116 42		
	Mary Carmichael—				
	Hotel	\$12 05			
	Railroad	40 00			
	Conveyance	13 00			
			65 05		
	Leila M. Thomas—				
	Hotel	\$35 10			
	Railroad	42 22			
	Conveyance	46 65			
	Telegraph and telephone	15			
			124 12		
	Clerk's salary		50 00		
	Office expenses		12 30		
	Postage		100 00		
	William B. Burford:				
	Stationery and printing		9 40		816 16

RECAPITULATION.

Salaries:			
Agents.....	\$3,069 30		
Clerk.....	550 00		
			\$3,619 30
Traveling expenses:			
Perry N. Hiser—			
Hotel.....	\$192 65		
Railroad.....	291 09		
Conveyance.....	91 00		
Telegraph and telephone.....	4 00		
		\$578 74	
Mark A. Smith—			
Hotel.....	\$393 90		
Railroad.....	337 50		
Conveyance.....	345 15		
Telegraph and telephone.....	90		
		1,077 45	
Mary Carmichael—			
Hotel.....	\$329 15		
Railroad.....	233 98		
Conveyance.....	319 35		
Telegraph and telephone.....	3 10		
		885 58	
Leila M. Thomas—			
Hotel.....	\$257 50		
Railroad.....	222 86		
Conveyance.....	342 55		
Telegraph and telephone.....	1 85		
		824 76	
			3,366 53
Office expenses.....			66 50
Postage.....			100 00
William B. Burford, Stationery and printing.....			152 44
Total expenses for 11 months.....			\$7,304 77
One-twelfth appropriation, deducted on account change in fiscal year.....			666 67
Balance reverting to General Fund.....			28 56
Total.....			\$8,000 00

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Indiana Farmers' Institutes

FOR THE YEAR
1906-1907

By W. C. LATTA
Superintendent Farmers' Institutes

PURDUE UNIVERSITY
Lafayette, Indiana
1907

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.
1907

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
INDIANAPOLIS, November 9, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, November 19, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

NOVEMBER 19, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, November 19, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer November 19, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

LETTERS OF TRANSMITTAL.

W. E. STONE, PH. D., *President Purdue University, Lafayette, Ind.:*

Sir—In behalf of the General Committee on Farmers' Institutes, I respectfully submit herewith a brief report of the Farmers' Institute work for the year ending September 30, 1907.

The Institute Act of 1907, the policy of the general committee under the new law, and the several circulars of information and suggestion sent out to the local Farmers' Institute officers for their guidance under the new regime, are fully set forth in the body of the report.

The program and a brief account of the proceedings of the tenth annual conference of officers and speakers and second normal institute, held in October, 1907, and the schedule of Farmers' Institutes for the winter season of 1907-08 are also included in the report.

Very respectfully yours,

W. C. LATTA,

Superintendent Farmers' Institutes.

Purdue University, Lafayette, Ind., November 7, 1907.

LAFAYETTE, IND., November 8, 1907.

HONORABLE J. FRANK HANLY, *Governor of Indiana, Indianapolis, Ind.:*

Dear Sir—I have the honor to transmit herewith the annual report of the Superintendent of Farmer's Institutes, in accordance with the act of the legislature of 1889, amended March, 1901.

Respectfully yours,

W. E. STONE,

President Purdue University.

INDIANA FARMERS' INSTITUTES.

REPORT OF THE SUPERINTENDENT FOR 1906-07.

The schedule of Farmers' Institutes for 1906-07 was published and sent out to the local associations in October, 1906.

The ninth annual conference of Farmers' Institute workers and First Normal Institute was held at Purdue University early in November, 1906. The proceedings of this gathering were published in the report of the superintendent for 1905-06.

The active work of holding the Winter Institutes began November 15, 1906, and closed February 28, 1907.

Early in March, 1907, plans for the work of the succeeding year were formulated in the office of the superintendent and published and sent out the first of April.

In the early summer of 1907, a series of Summer Institutes, designed especially for the farmers' wives and children, was arranged for the months of June, July, August and September, 1907.

Early in October, 1907, the list of speakers and schedule of Institutes for 1907-08 was published and sent out to the Institute officers and speakers.

Domestic Science was a prominent feature of the instruction at both winter and summer Institutes.

At a considerable number of the Winter Institutes special sessions were arranged for boys and girls. Competitions and contests of various kinds for the young people were important features of a number of the winter meetings. Through the co-operation of the county superintendents of schools and school teachers with the County Institute Associations the special work for boys and girls proved highly successful in several counties.

The General Assembly of 1907 enacted a law, approved

March 9th, making provision for enlarging the scope of the Farmers' Institute work and for meeting the local expenses of the County Institute Associations. This law will prove of great benefit when the provisions of its several sections become operative.

The prominent features of the work of the past year are referred to under appropriate headings in the body of this report.

Two hundred and fifty-four meetings were scheduled for the season of 1906-07. Nine of these meetings failed to materialize for want of timely local co-operation, but in addition to those named in the schedule, extra Institutes were held as follows:

LIST OF EXTRA FARMERS' INSTITUTES HELD.

County.	Place.	Date.	Speaker.
Cass.....	Twelve Mile.....	January 26, '07.....	
	Galveston.....	February 2, '07.....	Smith.
	Walton.....	February 14, '07.....	Cantley, Professor Goss.
	Young America..	February 15-16, '07.....	
De Kalb.....	Auburn.....	February 27, '07.....	Kline..
Franklin.....	New Trenton.....	February 9, '07.....	
	Mt. Carmel.....	March 2, '07.....	
	Fairfield.....	February.....	
	Shirley.....	January 11-12, '07.....	Coleman, Mrs. Meeks.
Hancock.....	Huntington.....	March 8-9, 1907.....	Maish, Miss Miller.
Huntington.....	Redkey.....	February 28, March 1, '07.....	Burris.
Jay.....	Dupont.....	March 28-29, '07.....	Miss Miller.
Jefferson.....	Leroy.....	February 23, '07.....	
Lake.....	Williams.....	August 31, '06.....	
Lawrence.....	Mitchell.....	April 1, '07.....	
	Bedford.....	April 2, '07.....	
	Valley Mills.....	January 10, '07.....	Cotton, Butler, Stockwell, Huston.
Marion.....	Arlington.....	January 19, '07.....	Coleman.
	Milroy.....	February 23, '07.....	Collins.
Rush.....	Pleasantville.....	February 16, '07.....	
Sullivan.....	South Bend.....	February 26-27 '07.....	Mr. and Mrs. Kline.
St. Joseph.....	Montmorenci.....	February 16, '07.....	Christie.
Tippecanoe.....	Purdue Univ.....	April 20, '07.....	
Vanderburgh.....	Kasson.....	January 5, '07.....	Burton..
	Daylight.....	March 16, '07.....	Professor Hunziker.
Wayne.....	Cambridge City..	February 4-5, '07.....	Professor Skinner, Burris.
	Greensfork.....	March 1-2, '07.....	Mrs. Bates, Billingsley.
Whitley.....	Hecla.....	January 16-17, '07.....	

The total number of winter meetings held was 273, two being three-day, 141 two-day and 130 one-day Institutes. In the case of the three-day meetings, the first or last day was held independently of State aid. The total number of days of Winter Farmers' Institutes was 418 and the total number of sessions 980.

ATTENDANCE AT WINTER INSTITUTES.

The following table gives a complete list of the winter meetings and the attendance at each in 1906-07; also the aggregate attendance by counties for the last three years

TABLE SHOWING ATTENDANCE AT WINTER FARMERS' INSTITUTES.

County.	Place, 1906-7.	No. Sessions, 1906-7.	Attendance, 1906-7.	Attendance by Counties.		
				1906-7.	1905-6.	1904-5.
Adams.....	Decatur.....	5	215			
	Berne.....	2	102	317	240	551
Allen.....	Ft. Wayne.....	2	73			
	Maysville.....	5	313			
	Poe.....	4	181			
	Monroeville.....	2	17	584	415	1,045
Bartholomew...	Jonesville.....	2	44			
	Hope.....	2	65			
Benton.....	Columbus.....	4	80	189	458	873
	Boswell.....	2	52			
	Wadena.....	2	104			
	Fowler.....	4	172			
	Otterbein.....	5	450	778	623	559
Blackford.....	Hartford City.....	4	223	223	242	338
Boone.....	Lebanon.....	5	232			
	Advance.....	2	194			
	Thorntown.....	3	132	558	413	431
Brown.....	Pike's Peak.....	2	44			
	Nashville.....	3	123			
	Needmore.....	3	44	211	181	340
Carroll.....	Flora.....	5	285			
	Delphi.....	4	45			
	Yeoman.....	2	114			
	Deer Creek.....	2	184	628	458	923
Cass.....	New Waverly.....	2	70			
	Clymers.....	2	98			
	Logansport.....	4	366			
	*Twelve Mile.....	2	175			
	*Galveston.....	2	75			
	*Walton.....	2	250			
	*Young America.....	4	225	1,259	1,338	813
Clark.....	Charlestown.....	2	41			
	Clover Grange.....	2	29			
	Prather.....	2	87			
	Bennettsville.....	2	24	181	251	519
Clay.....	Clay City.....	5	224			
	Staunton.....	5	126	350	484	500
Clinton.....	Middlefork.....	5	293			
	Rossville.....	3	213			
	Frankfort.....	8	558	1,064	1,251	1,329
Crawford.....	Dillman.....	4	110			
	Taswell.....	2	29	139	126	412
Daviess.....	Elnora.....	4	67			
	Washington.....	4	85			
	Alfordsville.....	2	68	220	394	573
Dearborn.....	Guilford.....	5	91			
	Mt. Tabor Ch.....	5	105	196	217	463
Decatur.....	Kingston.....	4	185			
	Sardinia.....	5	427	612	408	131
De Kalb.....	Auburn.....	2	68			
	Butler.....	2	99			
	Waterloo.....	5	168			
	*Auburn.....	2	180	515	481	1,448
Delaware.....	Muncie.....	4	185			
	Gaston.....	4	229			
	Selma.....	2	130	544	791	399
Du Bois.....	Du Bois.....	4	15			
	Huntingburg.....	5	97	112	198	320
Elkhart.....	Nappanee.....	5	650			
	Elkhart.....	4	390			
	Goshen.....	5	341	1,381	1,153	2,628

*Independent Institutes.

TABLE SHOWING ATTENDANCE AT WINTER FARMERS' INSTITUTES—Continued

County.	Place, 1906-7.	No. Sessions, 1906-7.	Attend- ance, 1906-7.	Attendance by Counties.		
				1906-7.	1905-6.	1904-5.
Fayette.....	Connersville.....	6	190			
	Everton.....	2	90	280	275	503
Floyd.....	Georgetown.....	5	42	42	60	276
Fountain.....	Hillsboro.....	2	73			
	Kingman.....	2	144			
	Veedersburg.....	4	64	281	355	640
Franklin.....	Mixersville.....	5	106			
	Fairfield.....	2	172			
	Brookville.....	4	302			
	*New Trenton.....	2	125			
	*Mt. Carmel.....	2	225			
	*Fairfield.....	2	33	963	789	963
Fulton.....	Akron.....	5	211			
	Kewanna.....	5	258			
	Rochester.....	5	394	863	1,478	1,475
Gibson.....	Owensville.....	5	209			
	Francisco.....	5	228	437	368	1,041
Grant.....	Swayzee.....	5	244			
	Marion.....	5	660			
	Fairmount.....	5	385	1,289	974	1,481
Greene.....	Lyons.....	2	22			
	Worthington.....	4	153			
	Bloomfield.....	2	22	197	660	340
Hamilton.....	Sheridan.....	2	97			
	Cicero.....	2	57			
	Noblesville.....	4	243	397	335	685
Hancock.....	Charlottesville.....	4	188			
	Greenfield.....	6	327			
	*Shirley.....	4	330	845	466	785
Harrison.....	Elizabeth.....	3	38			
	Crandall.....	3	92			
	Corydon.....	5	105	235	350	929
Hendricks.....	Danville.....	4	235			
	Pittsboro.....	5	176	411	517	623
Henry.....	Newcastle.....	4	544			
	Lewisville.....	3	224			
	Middletown.....	3	254	1,022	1,691	3,150
Huntington.....	Andrews.....	2	105			
	Bippus.....	2	78			
	Markle.....	2	214			
	Warren.....	2	126			
	*Huntington.....	4	400	923	529	827
Howard.....	*Kokomo.....	4	283			
	*Greentown.....	3	355	638	515	917
Jay.....	Portland.....	4	185			
	Salamonia.....	4	88			
	*Redkey.....	5	261	534	323	527
Jackson.....	Brownstown.....	3	40			
	Kurtz.....	3	101			
	Crothersville.....	2	41			
	Seymour.....	5	274	456	324	365
Jasper.....	Wheatfield.....	5	104			
	Remington.....	6	76			
	Rensselaer.....	6	390	570	377	1,226
Jefferson.....	Mannville.....	5	75			
	Kent.....	5	163			
	*Dupont.....	5	50	288	360	925
Jennings.....	Vernon.....	5	187			
	Zenas.....	3	114			
	Brewersville.....	2	76	377	245	685
Johnson.....	Trafalgar.....	2	210			
	Franklin.....	5	344	554	614	738
Knox.....	Oaktown.....	6	146			
	Freelandville.....	2	45			
	Fritchton.....	5	85	276	410	963
Kosciusko.....	North Webster.....	4	188			
	Warsaw.....	5	555			
	Sidney.....	2	261	1,004	481	777
Laporte.....	Union Mills.....	2	190			
	Wanatah.....	5	249			
	Laporte.....	5	243	682	997	850

*Independent Institutes.

TABLE SHOWING ATTENDANCE AT WINTER FARMERS' INSTITUTES—Continued.

County.	Place, 1906-7.	No. Sessions, 1906-7.	Attendance, 1906-7.	Attendance by Counties.		
				1906-7.	1905-6.	1904-5.
Lake.....	Hobart.....	2	60			
	Lowell.....	3	150			
	Ross.....	2	78			
	Crown Point.....	6	212			
Lagrange.....	*Leroy.....	3	92	592	447	1,031
	Brighton.....	2	169			
	Scott.....	3	200			
	Lagrange.....	5	633	1,002	1,852	1,638
Lawrence.....	Fayetteville.....	5	42			
	Mitchell.....	4	75			
	*Williams.....	2	500			
	*Bedford.....	2	50			
Madison.....	*Mitchell.....	1	150	817	94	254
	Anderson.....	5	490			
	Summittville.....	5	303			
	Pendleton.....	5	386	1,179	919	1,316
Marion.....	Lawrence.....	5	85			
	Wanamaker.....	5	47			
	*Valley Mills.....	5	40	172	341	904
	Culver.....	5	60			
Marshall.....	Plymouth.....	5	270			
	Bremen.....	5	239	569	1,149	793
	Loogootee.....	5	41			
	Shoals.....	2	23	64	80	108
Martin.....	Macy.....	4	172			
	Peru.....	4	201	373	388	563
	Bloomington.....	5	167			
	Ellettsville.....	2	112	179	274	308
Montgomery.....	Waveland.....	3	275			
	Ladoga.....	8	324			
	Wingate.....	3	234			
	Darlington.....	2	70	903	937	689
Morgan.....	Paragon.....	4	100			
	Mooreville.....	5	280	380	288	619
Newton.....	Kentland.....	5	87			
	Morocco.....	4	79	166	207	264
	La Otto.....	2	89			
	Cosperville.....	3	186			
Ohio.....	Cromwell.....	2	140			
	Wolf Lake.....	2	111	526	560	1,027
	Rising Sun.....	5	30	30	202	183
	Bromer.....	2	57			
Orange.....	Paoli.....	2	268			
	Orleans.....	5	280	605	681	676
	Spencer.....	4	106			
	Cataract.....	2	50			
Owen.....	Freedom.....	2	52	208	249	466
	Rosedale.....	4	194			
	Rockville.....	4	389	583	690	1,638
	Tobinsport.....	6	162			
Parke.....	Avery's Ch.....	5	106	268	114	454
	Hosmer.....	2	34			
	Winslow.....	3	63	97	324	420
	Valparaiso.....	5	159			
Perry.....	Hebron.....	2	37			
	McCool.....	3	51	247	278	412
	New Harmony.....	4	130			
	Cynthiana.....	5	315	445	784	1,128
Posey.....	Medaryville.....	5	92			
	Star City.....	5	166	258	163	353
	Roachdale.....	2	215			
	Cloverdale.....	2	93			
Pulaski.....	Greencastle.....	5	396	704	784	1,050
	Farmland.....	2	133			
	Ridgeville.....	5	85			
	Winchester.....	5	187	405	693	1,139
Putnam.....	Milan.....	5	74			
	Holton.....	4	43	117	245	646

*Independent Institutes.

TABLE SHOWING ATTENDANCE AT WINTER FARMERS' INSTITUTES—Continued.

County.	Place, 1906-7.	No. Sessions, 1906-7.	Attendance, 1906-7.	Attendance by Counties.		
				1906-7.	1905-6.	1904-5.
Rush.....	Manilla.....	4	239			
	Falmouth.....	2	208			
	Rushville.....	6	322			
	*Arlington.....	3	167			
	*Milroy.....	2	150	1,086	807	1,942
Scott.....	Scottsburg.....	5	89	89	157	354
Shelby.....	Shelbyville.....	5	270			
	Flat Rock.....	2	77			
	Morristown.....	5	253	600	921	788
Spencer.....	Richland.....	3	340			
	Dale.....	3	157			
	Chrisney.....	5	208	705	740	1,110
Starke.....	Hamlet.....	2	40			
	North Judson.....	3	49			
	Knox.....	3	211	300	591	161
Steuben.....	Angola.....	5	475			
	Salem Center.....	3	270	745	873	1,144
Sullivan.....	Carlisle.....	5	85			
	Shelburn.....	4	29			
	*Pleasantville.....	2	60	174	326	698
St. Joseph.....	Wyatt.....	3	279			
	North Liberty.....	5	302			
	*South Bend.....	5	450			
	Walkerton.....	3	372			
Switzerland.....	New Carlisle.....	3	170	1,573	995	3,200
	Patriot.....	5	53			
	Vevay.....	5	57	110	303	589
Tippecanoe.....	Monitor.....	2	225			
	Colburn.....	3	98			
	Stockwell.....	3	113			
	Odell.....	2	225			
	Cairo Ch.....	2	28			
	*Montmorenci.....	2	213			
Tipton.....	*Purdue Univ.....	2	58	960	437	684
	Tipton.....	5	933			
	Windfall.....	3	507			
	Kempton.....	3	284	1,724	1,548	1,875
Union.....	Liberty.....	4	531	531	540	699
Vanderburgh.....	Cypress.....	3	113			
	Stringtown.....	5	233			
	*Kasson.....	2	38			
	*Daylight.....	2	138	522	392	723
Vermillion.....	Dana.....	6	180	180	98	235
Vigo.....	Ellsworth.....	4	88			
	Honey Creek.....	4	74	162	151	318
	Roann.....	2	124			
Wabash.....	Lafontaine.....	2	455			
	No. Manchester.....	2	273			
	Wabash.....	4	221	1,073	285	1,027
	Pine Village.....	2	213			
Warren.....	Foster.....	2	83			
	West Lebanon.....	5	247	543	533	723
	Chandler.....	4	53			
Warrick.....	Boonville.....	5	76	129	170	279
	Kossuth.....	2	127			
	Claysville.....	2	113			
Washington.....	Pekin.....	2	46			
	Salem.....	4	200	486	449	297
	Williamsburg.....	5	287			
	Bethel.....	3	201			
Wayne.....	Boston.....	2	112			
	*Cambridge City.....	4	211			
	*Greenfork.....	5	268	1,079	982	900
Wells.....	Petroleum.....	2	82			
	Bluffton.....	5	493			
	Liberty Center.....	2	225	800	631	560
White.....	Monticello.....	5	76			
	Brookston.....	2	86			
	Wolcott.....	3	283	445	695	1,027

*Independent Institutes.

TABLE SHOWING ATTENDANCE AT WINTER FARMERS' INSTITUTES—Continued.

County.	Place, 1906-7.	No. Sessions, 1906-7.	Attend- ance, 1906-7.	Attendance by Counties.		
				1906-7.	1905-6.	1904-5.
Whitley.....	Columbia City.....	5	493			
	Larwill.....	3	107			
	Laud.....	3	75			
	*Hecla.....	5	271	946	343	769
		980	49,476	49,476	49,325	74,467

*Independent Institutes.

Number of Winter Institutes held 1906-07, 273; 1905-06, 250; 1904-05, 226; 1903-04, 175.
 Number of Institute sessions held 1906-07, 980; 1905-06, 918; 1904-05, 839; 1903-04, 832.
 Average attendance 1906-07, 181; 1905-06, 197; 1904-05, 329; 1903-04, 320.

The large average attendance shown in the above summary for 1903-04 and 1904-05 is due to a different method of reckoning attendance which was discarded because it exaggerated the actual number present.

The figures given for attendance in 1906-07 in the above table are in each case an average of the several sessions held. This is, of course, less than the actual number of persons attending, but is considered a fairly accurate method of computing attendance.

In the columns of attendance by counties, the aggregate of the average attendance reported for the several meetings in each county is given.

The *average* attendance in 1906-07 was slightly less than in 1905-06, but the *aggregate* attendance due to the greater number of meetings held is a little larger in 1906-07 than in the previous year. As but one speaker was sent to each meeting in 1906-07 and more meetings were held at small outlying points, the average attendance is fully as large as could be expected.

The counties which show an increased attendance in 1906-07 over the previous year are Benton, Boone, Decatur, Hancock, Huntington, Jay, Jackson, Kosciusko, Lawrence, Tippecanoe, Wabash, Washington, Wayne, Wells and Whitley. That these counties should show an increased attendance with but one speaker assigned speaks well for the local managements in these counties.

NUMBER OF INSTITUTES AND AVERAGE ATTENDANCE IN EACH MONTH.

FOR THE YEAR 1905-06.

Average attendance at	22	November Institutes	101
"	"	83 December Institutes	150
"	"	69 January Institutes	258
"	"	66 February Institutes	219
"	"	10 March Institutes	236

FOR THE YEAR 1906-07.

Average attendance at	19	November Institutes	87
"	"	67 December Institutes	134
"	"	94 January Institutes	211
"	"	84 February Institutes	205
"	"	5 March Institutes	216

It appears from the above tables that the January, February and March meetings in 1905-06 and again in 1906-07 were more largely attended than the November and December meetings. This is doubtless due to the fact that the farm work is not well out of the way until about the end of December.

SUMMARY OF INSTITUTES AND ATTENDANCE BY YEARS.

The following table gives a summary of the number of counties holding Institutes each year and the number of meetings held from the beginning of the work under State control to the present time. The table also shows the average and aggregate attendance for each year since 1894:

Year.	Number Counties Holding Institutes.	Total Number Institutes Held.	Average Attend- ance.	Aggregate Attend- ance.
1889-90	50	50		
1890-91	41	41		
1891-92	90	102		
1892-93	89	95		
1893-94	92	95		
1894-95	92	97	118	11,446
1895-96	92	103	272	28,016
1896-97	92	104	232	24,128
1897-98	92	108	272	29,376
1898-99	92	102	250	25,500
1899-00	92	104	269	27,976
1900-01	92	104	279	29,016
1901-02	92	197	191	37,603
1902-03	92	179	192	34,226
1903-04	92	175	338	59,189
1904-05	92	226	329	74,467
1905-06	92	250	197	49,325
1906-07	92	273	181	49,476

It appears from the above summary that although the average attendance for 1906-07 was a little less than in 1905-06, twenty-three more Institutes were held than in any previous year. The aggregate attendance was also higher than in any preceding year except 1904-05, when the method of computing attendance, in vogue that year, grossly exaggerated the real number present.

While the policy of holding an increased number of meetings, many of which occur at small points in the outskirts of the counties, must of necessity reduce the average attendance, it is believed that by taking the meetings directly into good farm neighborhoods, the practical value of the work to the farmers will be greatly increased.

SUMMER FARMERS' INSTITUTES IN 1907.

As the Institute fund was not exhausted on the Winter Institutes of 1906-07, some summer meetings were arranged for in 1907. These meetings were one day each, with morning and afternoon sessions. They were planned especially for the farmers' families, and hence subjects of especial interest to the farmers' wives and children were discussed. The following are the subjects most frequently presented at these Summer Institutes: "Food and Its Preparation," "Canning Fruits and Vegetables," "Food Adulterants and Preservatives," "The Farm Dwelling and Its Surroundings," "How to Keep Poultry Healthy," "Care of Laying Hens," "Poultry Keeping for Boys and Girls," "Education for Home-Making," "Industrial Training for the Public Schools," "Boys' and Girls' School Clubs."

The following table gives a list of these meetings, with dates and places of meeting, assigned speakers and the average attendance of the morning and afternoon sessions, as reported by the speakers and officers:

SCHEDULE OF SUMMER FARMERS' INSTITUTES HELD IN JUNE, JULY, AUGUST
AND SEPTEMBER, 1907.

County.	Place.	Month and Date.	No. Ses- sions.	Av. At- tend- ance.	Assigned Speakers.
Rush.....	Glenwood.....	June 14th.....	2	55	Miss Miller, Prof. Latta.
Boone.....	Lebanon.....	June 19th.....	2	57	Miss Miller, Prof. Latta.
Clay.....	Clay City.....	June 21st.....	2	26	Miss Miller, Mr. Crane.
Morgan.....	Monrovia.....	June 22d.....	2	92	Miss Miller, Mr. Crane.
Tipton.....	Tipton.....	June 26th.....	2	113	Mr. Crane, Prof. Latta.
Madison.....	Anderson.....	June 27th.....	2	88	Mr. Crane, Prof. Latta.
Grant.....	Sweetser.....	June 28th.....	2	115	Miss Miller, Prof. Latta.
Clinton.....	Frankfort.....	June 29th.....	2	32	Miss Miller, Mr. Crane.
Montgomery.....	Crawfordsville.....	July 24th.....	1	100	Mrs. Meeks, Prof. Latta.
Monroe.....	Near Bloomington.....	July 25th.....	1	38	Mrs. Meeks, Prof. Latta.
Scott.....	Scottsburg.....	July 27th.....	1	18	Mrs. Carter, Prof. Latta.
Jennings.....	Vernon.....	July 30th.....	2	33	Mrs. Romine, Prof. Latta.
Floyd.....	Grant Line.....	July 31st.....	2	62	Mrs. Romine, Prof. Latta.
Floyd.....	Edwardsville.....	August 1st.....	2	27	Mrs. Romine, Prof. Latta.
Crawford.....	Grantsburg.....	August 2nd.....	2	152	Mrs. Romine, Prof. Latta.
Pike.....	Liberty Church.....	August 3d.....	2	29	Mrs. Romine, Prof. Latta.
Pike.....	Oatsville.....	August 5th.....	2	53	Mrs. Romine, Prof. Latta.
Gibson.....	Princeton.....	August 6th.....	2	29	Mrs. Romine, Prof. Latta.
Posey.....	Poseyville.....	August 7th.....	2	65	Mrs. Romine, Mr. Crane.
Vanderburgh.....	Stringtown.....	August 8th.....	2	95	Mrs. Romine, Mr. Crane.
Daviess.....	Washington.....	August 9th.....	2	44	Mrs. Romine, Mr. Crane.
Martin.....	Trinity Springs.....	August 10th.....	2	144	Mrs. Romine, Mr. Christie.
Knox.....	Bicknell.....	August 14th.....	2	56	Mrs. Carter, Prof. Latta.
Owen.....	Carp.....	August 27th.....	2	75	Mrs. Romine, Prof. Latta.
Putnam.....	Cloverdale.....	August 28th.....	2	87	Mrs. Romine, Prof. Latta.
Tiptecanoe.....	Colburn.....	August 29th.....	2	135	Mrs. Romine, Mr. Cantley
Jay.....	Salamonia.....	August 30th.....	2	39	Mrs. Meeks, Mr. Crane.
Lawrence.....	Bedford.....	August 30th.....	2	1050	Mrs. Lindley, Mr. Christie.
Mashall.....	Culver.....	August 31st.....	2	70	Mrs. Romine, Prof. Latta.
Allen.....	Marquette.....	August 31st.....	2	350	Mrs. Meeks.
Fayette.....	Connorsville.....	September 4th.....	2	36	Mr. Crane.
Pulaski.....	Winamac.....	September 4th.....	2	72	Mrs. Romine, Prof. Fisher.
Starke.....	North Judson.....	September 5th.....	2	52	Mrs. Meeks, Mr. Crane.
Lagrange.....	Lagrange.....	September 6th.....	2	159	Miss Miller, Prof. Latta.
Huntington.....	Huntington.....	September 7th.....	2	47	Miss Miller, Prof. Latta.
Allen.....	Hoagland.....	September 7th.....	2	275	Mrs. Meeks.
Cass.....	Logansport.....	September 17th.....	2	53	Miss Miller, Prof. Latta.
Franklin.....	Brookville.....	September 18th.....	2	42	Miss Miller, Prof. Latta.
Brown.....	Nashville.....	September 19th.....	2	77	Miss Miller, Prof. Latta.
Greene.....	Solsbury.....	September 20th.....	1	95	Miss Miller, Mr. Crane.
Martin.....	Burns City.....	September 21st.....	2	73	Miss Miller, Mr. Crane.

EXPENDITURES OF THE STATE INSTITUTE FUND.

The classified disbursements of the state appropriation for Farmers' Institutes for the eleven months ending September 30, 1907, duly certified by the Secretary of Purdue University, are as follows:

DR.

Received of State Treasurer.....\$9,166 67

CR.

Expense holding 313 Winter and Summer Institutes	\$6,679 73
Salary of Superintendent	1,250 00
Clerical work	493 62
Printing, stationery and postage	294 93
Charts and cases for speakers.....	238 00
Traveling expenses of Superintendent.....	68 63

Printing annual report for 1905-'06	\$84 58
Express, freight, telephone, etc.....	26 95
Furniture	16 65
Supplies	8 58
Membership dues American Association Farmers' In- stitute Workers	5 00
	<hr/>
	\$9,166 67 \$9,166 67

INSTRUCTION IN DOMESTIC SCIENCE AT FARMERS' INSTITUTES.

Instruction in Domestic Science was a prominent feature of the Farmers' Institute work the past year. Miss Bertha Melville Miller, of Franklin, Ind., devoted three months to lecturing at Winter Farmers' Institutes on "Foods," "Household Management," and "Education for Home-Making." Miss Miller attended, in all, fifty-three winter meetings. This feature of the Farmers' Institute work has, in recent years, been very popular, and the demand for such instruction will probably increase with the organization of Woman's Auxiliaries in the remaining counties of the state. This seems right and proper because the farmers' wives and daughters are just as much entitled to instruction in matters pertaining to the home as are their husbands concerning the affairs of the farm.

As would naturally be expected, instruction in Domestic Science lines was an especially prominent feature of the Summer Institutes, instruction in this line being given by Miss Bertha M. Miller, Franklin, Ind., and by Mrs. Margaret Romine (nee Miss Mather), of Mooresville, Ind.

INSTRUCTION IN CORN IMPROVEMENT.

At many of the Farmers' Institutes the past winter, much interest was shown in corn culture, corn improvement, and corn judging. This interest is doubtless due in part to the annual Corn Schools held at Purdue University, in part to the co-operative experiments and regular bulletins of the Experiment station, and in part to the extension work of the station so efficiently conducted by Mr. G. I. Christie. This extension work included a number of corn trains over Indiana railway lines and the distribu-

tion of literature relating to corn improvement, corn exhibits, etc. Special sessions, devoted largely to corn topics, were features of a goodly number of the Farmers' Institutes and extra meetings for corn exhibits and the discussion of corn topics were held at a number of points.

In view of the fact that corn is Indiana's greatest crop, the interest at Farmers' Institutes in subjects relating to corn is commendable. This interest will, without doubt, continue and it will surely effect a material increase in the yield and improvement of the quality of the corn crop of Indiana.

LIVE STOCK TOPICS.

Subjects relating to breeding, feeding and improvement of live stock are finding places more frequently than heretofore on the programs of Farmers' Institutes. This interest is sure to grow because the live stock industry is a very large one in Indiana and is destined, in the near future, to assume larger proportions. Program committees are reminded that the only truly self-sustaining agriculture includes animal husbandry as a prominent feature of the farming operations.

WORK FOR BOYS AND GIRLS.

It is highly gratifying to note the growing tendency of the Farmers' Institute Associations to incorporate in their programs features that are attractive and helpful to the boys and girls. In a number of instances the past winter, special sessions for boys and girls were held. Exhibits of farm and home products by the young people were prominent features of a number of these meetings. In a few cases, judging contests for boys and girls were also conducted. Thus far, however, the boys have received more attention than the girls by the local Farmers' Institute Associations. In the interest of fairness, this should be changed in the near future. The girls are entitled to just as much attention as the boys at Farmers' Institutes, first, because they are just as apt and just as easily interested as are the boys, and second, because it is just as important

to interest the girls in the farm and farm home as the boys.

The recent Farmers' Institute Act will, in the near future, give a decided impetus to instruction at the Farmers' Institutes that will be especially profitable to the young people. Suggestions that may prove helpful in enlarging and extending the work for boys and girls at Farmers' Institutes appear elsewhere in this report.

ACTS RELATING TO FARMERS' INSTITUTES.

The Indiana Legislature has enacted three laws relating to the Farmers' Institute work. The original act making provision for Farmers' Institutes under state auspices was passed by the General Assembly of 1889. The Legislature of 1901 increased the annual appropriation from five to ten thousand dollars. The General Assembly of 1907 passed a very important law providing for the financial support of the County Farmers' Institute Associations, and for meeting the expenses of conducting contests of various kinds, that will prove especially instructive and helpful to the young people. As soon as practicable, after the passage of this law, a circular giving the text of the several Farmers' Institute Acts and the policy of the board of control was sent out to the Farmers' Institute officers and speakers throughout the state.

The full text of the above-named circular is given herewith:

INDIANA LAWS RELATING TO FARMERS' INSTITUTES AND THE POLICY OF THE GOVERNING BOARD.

The text of the several acts relating to Farmers' Institutes is as follows:

THE ACT APPROVED MARCH 9, 1889.

An act to encourage the study of agriculture, horticulture, economic entomology and agricultural chemistry, providing for County Institutes, prescribing the duties of trustees and faculty of Purdue University in connection therewith, and making an appropriation therefor.

Section 1. Be it enacted by the General Assembly of the State of Indiana, That it is hereby made the duty of the Committee on Experimental Agriculture and Horticulture of the Board of Trustees, together with the faculty of the School of Agriculture of Purdue University, to appoint, before November 1st of each year, suitable persons to hold in the several counties of the state, between the first of November and the first day of April of each year, County Institutes for the purpose of giving to farmers and others interested therein instruction in agriculture, horticulture, agricultural chemistry and economic entomology.

Sec. 2. Such Institutes shall be held at such times and places as said committee and faculty may determine, and under such rules, regulations and methods of instruction as they may prescribe: Provided, however, That such Institutes shall be so conducted as to give to those attending the results of the latest investigations in theoretical and practical agriculture and horticulture.

Sec. 3. For the purpose of carrying out the provisions of this act, paying the salaries of instructors and other necessary expenses, the sum of \$5,000 is hereby appropriated, to be expended under the direction of the said committee of said Board of Trustees, and they shall annually report such expenditures and the purpose thereof to the Governor.

THE ACT APPROVED MARCH 4, 1901.

This act merely amended section 3 of the act of 1889 to read as follows:

Section 3. For the purpose of carrying out the provisions of this act, paying the salaries of instructors and other necessary expenses, the sum of ten thousand dollars (\$10,000) is appropriated to be expended under the direction of the said committee of said Board of Trustees, and they shall annually report such expenditures and the purpose thereof to the Governor.

THE ACT APPROVED MARCH 9, 1907.

An act for the encouragement of Farmers' Institutes and authorizing the county auditor to draw warrants under certain conditions:

Section 1. Be it enacted by the General Assembly of the State of Indiana, That in order to promote the extension of Farmers' Institute work, to

encourage its better organization and to increase the moneys to be expended for such work, the chairman of any Farmers' County Institute held under the regulations adopted by the superintendent of County Institutes, in any county in the State of Indiana, shall be entitled to draw from the county treasury of such county a sum of money not exceeding one hundred dollars (\$100.00), to be paid on a warrant drawn by the county auditor, which said warrant shall be issued to such county chairman upon full compliance with the terms of this act.

Sec. 2. The chairman of any Farmers' County Institute, making application for a warrant as provided for in section 1 of this act, shall file with the county auditor, at the time of making such application, a verified statement as follows, to wit: A true and correct statement of the attendance at such County Institute, which statement shall contain the names of the persons so attending; and no name shall be listed as attending unless the person so listed shall have attended at least one full session of such Institute and paid a membership fee of at least twenty-five cents (\$.25). Such statement shall also show the total amount of such membership fees collected at such Institute; a true and correct itemized statement of the expenses of such County Institute, the receipted vouchers showing payment in full of all expenses so itemized being attached to such report.

Sec. 3. Any county in the State of Indiana, where auxiliary organizations to Farmers' County Institutes have been or hereafter may be organized under regulations adopted by the superintendent of County Institutes, such auxiliary organizations to be known as Woman's Auxiliary organizations for County Institute work, and such auxiliary organizations are maintained separate and distinct from the organization of such County Institutes of such county and work under separate programs, and such auxiliary organization charge and collect an annual membership fee of not less than fifteen cents, and the president of such auxiliary organization makes a verified report to the president of the County Institute in all particulars as required of the president of the County Institutes in section 2 of this act, then such auxiliary organizations shall be considered a part of such County Institute and the report of such auxiliary organizations shall be combined with the report of such County Institute by adding similar items, and the totals of such additions shall be considered as the totals of the County Institute.

Sec. 4. The county auditor shall draw a warrant on the county treasurer payable to the order of the chairman of the County Institute for the sum represented by subtracting the total receipts of membership dues from the total expenses of conducting such Institute as shown by the county chairman's itemized report and receipted vouchers filed with the report of such chairman: Provided, That no warrant shall be drawn for a sum in excess of the total receipts of membership dues; and provided further, That such warrant shall be drawn but once during any calendar year.

Sec. 5. The term expenses as used in section 2 of this act shall be construed to include any prize or prizes offered by such County Institute or auxiliary organizations to stimulate competition in experimental work in agricultural or domestic science research; rewards offered for results of extraordinary excellence in agriculture or domestic science domain; or the necessary cost of co-operative work of an educational character along the

lines of agricultural, horticultural or domestic science development: Provided, That the scheme or plan of such special work provided for in this section shall have been adopted by the County Institute at its last annual session and that competition shall be open to every eligible person of that particular class residing in such county. In adopting any such scheme or plan of special work every member of such County Institute or auxiliary organization not in arrears for payment of annual membership dues, shall be entitled to one vote; and a plurality of all votes cast shall determine the adoption of any proposed scheme.

Sec. 6. Any chairman of the County Institute who shall knowingly file a false report; or any officer of the County Institute or auxiliary organization whose duty it shall be to keep a record of the attendance, or render an accounting for moneys received or expended who shall knowingly make or submit a false report; or any officer of such County Institute or auxiliary organization who shall expend any of the receipts of such County Institute or auxiliary organization in any other manner than that shown by such verified report and by the receipted vouchers filed therewith; or any person who shall sign a fraudulent voucher showing moneys expended which were not so expended shall be deemed guilty of a misdemeanor and shall upon conviction, be fined in any sum not exceeding fifty dollars.

Sec. 7. This act is supplemental to the act approved March 9, 1889, in force May 10, 1889, and repeals none of the provisions of said act.

While not making specific provision therefor, the evident spirit and intent of the act of 1889 contemplated at least a measure of co-operation on the part of those for whose benefit the law was enacted. The history of the Farmers' Institute work throughout the country clearly shows that the benefits to be derived have been in direct proportion to the intelligent and effective co-operation of the people with the state Institute managements.

Recognizing the need of co-operation, the authorities of Purdue University, who by the provision of the said Act were directed to administer the work, recommended the formation of county organizations throughout the state to assist in making the work more effective. As a further encouragement to local co-operation, a portion of the state fund was set apart for meeting the local expenses of the county associations.

Under the above named conditions the Institute work has steadily developed from year to year, but the very growth and expansion of the Institute work have financially embarrassed both the general and the local Institute managements. For the past two years the general management has not had sufficient funds to adequately man, with effective speakers, the large number of Farmers' Institutes called for. The County Associations have also felt the pinch of inadequate funds to meet the local expenses of the increased number of meetings. In the hope of bringing relief to the local organization, the general management urged that steps be taken in the several counties to secure a large paid membership in the local associations which would actively interest a great many people, and also provide more ample funds for conducting the Institute work. Under the terms of the original act the general management deemed it unwise to require a paid membership, but chose to leave it with the local associations to decide. As a matter of fact, and in the great majority of instances, the local

organization, as such, is not an active factor in the Farmers' Institute work of the state. In most cases the burden of effort and responsibility has been allowed to rest very heavily on the shoulders of a few faithful officers and public spirited individuals. While appreciative of the benefits of the Institute work and generally in attendance at the meetings, the great mass of the people give little personal aid and less financial support to the local institute managements in most of the counties of the state.

In view of the foregoing facts, the new Institute act comes most opportunely to the support of the work, as it provides a way to secure ample funds for the local association through active local organization and a paid membership. This will not only invigorate and strengthen the local organizations, but it will also relieve the general management, which may now, without detriment to the Local Associations, devote the entire state appropriation to the work of instruction and supervision in accordance with the plain intent of the original act.

The attention of local officers and workers is therefore called to the specific provisions of the recent act, compliance with all of which is necessary to secure the benefits intended.

PROVISIONS OF THE ACT OF 1907.

1. Section 1 entitles the county chairman to draw from the county treasury a sum not exceeding one hundred dollars for the support of the Institute work on condition of full compliance with the terms of the Act.

2. Section 2 provides that the county chairman shall file with the county auditor, when he applies for the money, a verified statement showing attendance, the aggregate amount of membership dues collected and an itemized account of expenses incurred in the Institute work with receipted vouchers showing that the expenses have been paid.

3. Section 3 permits the chairman to count the attendance at both the Institute and Woman's Auxiliary and include the expenses and fees collected by both associations.

4. Section 4 provides that the county treasurer shall pay only the excess of expenses, not exceeding one hundred dollars over the total amount of fees collected, provided that this excess is not greater than the aggregate of fees paid. That is, the treasurer is authorized to pay one dollar for each dollar raised as dues, provided, of course, the excess of expenses over fees collected requires so much. To illustrate: If the association raises fifty dollars as membership dues, and expends one hundred dollars in conducting the work, the county treasurer will pay fifty dollars. If the association collects fifty dollars in dues and expends only seventy-five dollars, the county treasurer will then pay but twenty-five dollars. The full measure of benefit intended in the act will be realized only when the association raises one hundred dollars in dues and expends two hundred dollars in the work, in which case the county treasurer will pay one hundred dollars as prescribed in the act.

5. Section 5 sets forth what expenses may be included in the bill of the county chairman. In addition to the usual expenses for postage, printing and stationery, hall rent, necessary traveling expenses, extra speakers, etc., the bill may include prizes offered by the local association to stimulate competition in the production of agricultural and household products,

or for extraordinary excellence in the domain of Agriculture or Domestic Science; also the necessary cost of inaugurating and maintaining co-operative work of an educational character in the lines named. This section further provides that the plan of special work, such as crop-growing and class-judging contests, shall have been adopted by the county association at its last annual session, and that the competition or contest shall be open to every eligible person of the class designated residing in the county.

6. Section 6 makes it a misdemeanor, subject to a fine not exceeding fifty dollars, for an officer of an Institute to knowingly make a false report of expenses, attendance or fees collected, or expend any of the receipts of the Institute in any other manner than that specified in the report; also a like fine may be imposed upon any person who shall sign a fraudulent voucher showing a fictitious expenditure of money.

7. Section 7 shows the act to be supplemental to the institute act of 1889.

According to the attorney-general, county funds will be available for meeting the usual local expenses of the Institute work the coming season, but may not be used to defray the expenses of the competition named in section 5 unless such plan of competition has been agreed upon at the last annual session of the Institute Association. The officers of the Farmers' Institute Association in each county should, therefore, inform the county commissioners of the plan of work to be followed the coming year and request them to include said association in their budget.

GENERAL REGULATIONS FOR THE CONDUCT OF THE INSTITUTE WORK.

In view of the provision in the recent institute act for effecting local organization, and for meeting the expenses of the local associations, and in accordance with the provisions of the original act of 1889, the committee on institutes announces the following general policy and plan of conducting the work under the existing laws.

1. The superintendent of Institutes will, as heretofore, appoint each year a suitable person in each county to conduct the Institute work under the provisions of the Institute act of 1889. The chairman of the County Institute Association will, of course, be recognized as such person, but the right to appoint another is reserved.

2. The State Superintendent of Farmers' Institutes will, as heretofore, with the advice of the county officers, arrange the schedule of meetings, reserving the right to fix the time and place of same, and assign the state speakers.

3. The committee on institutes will use the state appropriation to pay for the services and traveling expenses of state speakers; the general supervision of the work; the holding of an annual conference and normal institute for the benefit of the county chairmen, the presidents of the woman's auxiliaries and the state speakers; and for such further improvement and extension of the Farmers' Institute work as the funds will permit.

4. The local expenses of the Farmers' Institutes, such as hall rent, extra speakers, postage, printing and stationery, etc., will be met from the fund derived from membership dues, supplemented by the appropriation from the county treasury as provided for in the institute act of 1907.

5. The Committee on Institutes authorizes and directs the County In-

stitute Association and Woman's Auxiliary, acting together upon the request of the State Superintendent of Farmers' Institutes, to advise said officer as to the times, places and subjects desired for meetings to be held in the county the ensuing year.

6. The institute committee authorizes and directs the County Institute Association, including the Woman's Auxiliary (where one exists or may be formed) to arrange for and duly advertise the meeting or meetings announced in the schedule of the State Superintendent of Farmers' Institutes, and properly conduct the same under such regulations as may be prescribed by said committee, and promptly make official report, of each meeting held, to the State Superintendent.

7. The Committee on Institutes recognizes that the nature of the Institute work permits the discussion of a wide range of subjects bearing upon Agriculture, Horticulture, Animal Husbandry, Dairying, Truck Farming, Gardening, the Home, the School, the Highway, Rural Improvement, Relation of Town and Country and the Development of the Agricultural Resources of the Locality; but it also recognizes that the above-named subjects can be presented without in any way involving political, sectarian, factional or personal discussion. The general management, therefore, rules that all subjects of a purely factional, political, personal, religious, sectarian, social or temperance nature should be excluded from the programs of the Farmers' Institute meetings. All heated, partisan or personal discussion at the meetings upon any subject is strictly prohibited. Speakers are instructed to urge, and chairmen authorized and directed to secure, the enforcement of the above ruling. The discussion of public institutions, of farm and other organizations or of business enterprises, either for the purpose of advertisement, attack or defense, is not germane to the Farmers' Institute work and should therefore, not be permitted.

8. The committee on institutes directs that every meeting, to which a speaker is assigned at state expense, or for which county funds will be expended, shall be open to the general public without restriction and without the payment of an admission fee.

ADVISORY REGULATIONS.

1. The secretary of the County Association and also of the Woman's Auxiliary should keep a careful record of the work done and of the meetings held, from year to year, in a secretary's book. This record would come, in time, to have much historical and practical value.

2. An assistant secretary in each association should keep, from year to year, a complete record of members in good standing and dues paid, in a substantial roll book. If properly kept, showing in tabular form, the dues paid by each member and open to inspection, this book would prove an incentive to the members to remain in good standing by regularly paying their dues from year to year.

3. The treasurer of each association should keep a careful record of moneys received and paid out, giving receipts for all funds paid in, taking a receipt for each disbursement, and paying out money only when authorized by the association, its executive committee, or upon the written order of the chairman or president, countersigned by the secretary.

4. Each township vice-president should be authorized to solicit mem-

bers in his or her township. On payment of dues, each member should receive a membership card as a receipt for dues. The names and addresses of the paid members should be promptly handed or sent, to the assistant secretary for enrollment, and the dues collected should be promptly turned over to the treasurer of the association.

5. The association should procure the proper books and blanks in order that the foregoing regulations may be easily and systematically complied with by the several officers.

6. In view of the provision made for the local expenses in the recent institute act, it is recommended that the undesirable advertising forms of programs be discontinued. If such are longer used, care should be exercised to avoid advertising anything of a questionable character.

The accompanying forms of membership card and membership roll may serve to assist in securing members and in keeping a record of the payment of dues from year to year.

This Certifies that

M

is a member of the
County Farmers' Institute Association for
the year ending March 31, 190.....

Signed Secretary.

Annual Dues Cents.

This Certifies that

M

is a member of the Woman's Auxiliary of the
..... County Farmers' Inst.
Ass'n for the year ending March 31, 190.....

Signed Secretary.

Annual Dues Cents.

Membership Roll of the.....County
Farmers' Institute Association (or Woman's Auxiliary).

[illegible]

The recent act renders desirable and necessary some slight changes in the forms of constitution under which the Farmers' Institute Associations and the Woman's Auxiliaries are now working. These have been revised and are sent, herewith, on accompanying sheets with the recommendation that they be adopted at the early convenience of the associations in the several counties of the state.

As the recent institute act makes provision for conducting contests and for awarding prizes to successful contestants, a circular giving information and suggestions relative to such contests will be sent out, a little later, from the office of the undersigned.

In conclusion, the county chairmen of the Farmers' Institutes and the presidents of the Woman's Auxiliaries are reminded that the recent institute act requires that a receipted voucher for each expenditure on the Institute account must be filed with the bill when the latter is presented to the county auditor for payment. Each of the above-named officers should, therefore, procure a pocket receipt book and take receipts for postage, stationery, necessary traveling expenses, etc., in order that the proper accounting may be made when the bill is rendered.

The forms of Constitution and By-Laws for the County Farmers' Institute Association and the County Woman's Auxiliary, which were sent out with the foregoing circular, are given below:

CONSTITUTION AND BY-LAWS OF THE COUNTY FARMERS' INSTITUTE ASSOCIATION.

Article I—Name.

This organization shall be known as the
County Farmers' Institute Association.

Article II—Object.

Its object shall be to assist the State Institute management in increasing the number and value of Farmers' Institutes, extending their benefits, and thereby promoting the agricultural interests of the county as well as the financial, social, intellectual and moral betterment of its citizens; also to encourage Boys' and Girls' School Clubs for growing, making and judging farm and home products.

Article III—Members.

Any resident of the county may become a member by payment of the annual dues.

Article IV—Meetings.

Section 1. The association shall hold an annual meeting at the time of the Annual Farmers' Institute, scheduled by the state superintendent, or within one month thereafter, for the purpose of electing officers, adopting plans for the succeeding year, collecting the annual dues, making up the roll of members and transacting such other business as may properly come before it.

Sec. 2. Other meetings may be held at such times as may be agreed upon.

Article V—Dues.*

Section 1. The annual dues shall be cents per member, payable in advance, at or before the time of the annual meeting.

Sec. 2. All members whose dues remain unpaid at the time of the annual meeting shall be dropped from the roll of voting members, but may be reinstated at any time on the payment of dues for the current year.

Article VI—Officers.

The officers shall consist of a president, or chairman, secretary, assistant secretary, treasurer and one vice-president for each township in the county.

Article VII—Duties of Officers.

Section 1. The Chairman shall have general supervision of the Institute work in the county, acting under the instructions of the state superintendent in arranging for and conducting all Farmers' Institutes held

*The Institute Act of 1907 requires that the dues shall be not less than twenty-five cents per member.

under state auspices. He shall appoint suitable persons to fill any vacancies that may occur between elections, make statement of membership and render bill of expenses incurred, to the county auditor, as provided in the institute act approved March 9, 1907.

Sec. 2. In addition to the usual duties of the office, the secretary shall prepare a list of the officers-elect and of the paid-up members, and make reports of the several Institutes held under state auspices, in accordance with regulations prescribed by the state superintendent of Institutes.

Sec. 3. The treasurer shall, in addition to the usual duties of his office, collect the annual membership dues, keep an accurate record of the same and furnish the secretary, within one week after the annual meeting, a complete list of the paid-up members, with postoffice addresses.

Sec. 4. It shall be the duty of each vice-president to interest the people of his township in the organization and its work, circulate notices of meetings to be held, and take an active part in arranging for meetings to be held in his township.

Sec. 5. The president, secretary, treasurer and the several vice-presidents shall constitute an executive committee which shall have charge of the affairs of the association in the intervals between meetings. This committee, with the like committee of the woman's auxiliary, shall, upon request of the state superintendent, suggest desirable dates and places for Farmers' Institutes themes for assigned speakers, and give such other information as said superintendent may desire in arranging the schedule of Institutes.

Article VIII—Quorum.

Section 1. *Twenty-five paid-up members shall constitute a quorum, but a majority vote of the membership is necessary to amend the Constitution or By-Laws.

Sec. 2. A majority of the executive committee, at any duly announced meeting, shall constitute a quorum of said committee.

Article IX—Woman's Auxiliary.

A Woman's Auxiliary for the purpose of holding special or separate sessions of the Institute for women may be formed whenever it may be deemed desirable.

Article X—By-Laws.

The association may adopt such by-laws as may seem necessary to further the work of the association, provided, that no by-law shall conflict with the constitution of the association.

Article XI—Amendments.

The Constitution or By-Laws may be amended at any regular meeting, due notice in writing having been given at a previous regular meeting, provided, the proposed amendment shall have been approved by the state management of Farmers' Institutes.

*The number may be reduced to fifteen or increased if thought desirable.

CONSTITUTION AND BY-LAWS OF THE COUNTY WOMAN'S AUXILIARY.

Article I—Name.

This organization shall be known as the Woman's Auxiliary of the
..... County Farmers' Institute Association.

Article II—Object.

Its object shall be to aid and supplement the Farmers' Institute Association in promoting improvement in the art and science of household economics, and the development, in its members, of those housewifely qualities which characterize the good housekeeper and homemaker; also to encourage School Girls' Home Culture Clubs.

Article III—Members.

Any resident of the county may become a member by payment of the annual dues.

Article IV—Meetings.

Section 1. The Woman's Auxiliary shall hold an annual meeting at the time of the Annual Farmers' Institute, scheduled by the state superintendent, or within one month thereafter, for the purpose of electing officers, making up the roll of members and transacting such other business as may properly come before it.

Sec. 2. Other meetings may be held at such times as may be agreed upon.

Article V—Dues.*

Section 1. The annual dues shall be cents per member, payable in advance, at or before the time of the annual meeting.

Sec. 2. All members whose dues remain unpaid at the time of the annual meeting shall be dropped from the roll of voting members, but may be reinstated at any time on the payment of dues for the current year.

Article VI—Officers.

The officers shall consist of a president, secretary, treasurer and one vice-president for each township in the county.

Article VII—Duties of Officers.

Section 1. In addition to the usual duties of the office, the president shall appoint such committees as may be deemed desirable, appoint suitable persons to fill any vacancies in office that may occur between elections, and make statement to County Institute chairman as prescribed in the Institute Act of 1907.

*The Institute Act of 1907 requires that the dues shall be not less than fifteen cents per member.

Sec. 2. The duties of the secretary and treasurer shall be such as usually pertain to the offices named.

Sec. 3. It shall be the duty of each vice-president to interest the ladies of her township in the organization, to circulate notices of its meetings, and to take an active part in arranging for the meetings to be held in her township.

Sec. 4. The president, secretary, treasurer and the several vice-presidents shall constitute an executive committee which shall have charge of the affairs of the auxiliary in the intervals between meetings. This committee shall assist the executive committee of the Farmers' Institute Association in suggesting to the state superintendent desirable dates, places, etc., for Farmers' Institutes.

Article VIII—Quorum.

Section 1. *Fifteen members in good standing shall constitute a quorum but a majority vote of the membership is necessary to amend the Constitution or By-laws.

Sec. 2. A majority of the executive committee, at any duly announced meeting, shall constitute a quorum of said committee.

Article IX—By-Laws.

The auxiliary may adopt such by-laws as may seem necessary to further the work of the association, provided, that no by-law shall conflict with the Constitution of the association.

Article X—Amendments.

The Constitution or By-Laws may be amended at any regular meeting, due notice in writing having been given at a previous regular meeting, provided the proposed amendment shall have been approved by the state management of Farmers' Institutes.

*The number may be reduced to ten or increased if thought desirable.

SUGGESTIONS FOR CONDUCTING BOYS' AND GIRLS' CONTESTS.

In order to aid the County Institute Associations in conducting contests of various kinds authorized by the Farmers' Institute Act of 1907, the following circular was prepared and sent out in April, 1907:

CONCERNING BOYS' AND GIRLS' CONTESTS CONTEMPLATED IN THE INSTITUTE ACT OF 1907.

The recent Farmers' Institute Act, approved March 9, 1907, makes provision to encourage the attainment of excellence in agriculture and domestic science as follows:

Section 5. "The term expenses as used in section 2 of this act shall be construed to include any prize or prizes offered by such county institute or auxiliary organization to stimulate competition in experimental work in agricultural or domestic science research; rewards offered for results of extraordinary excellence in agriculture or domestic science domain; or the necessary cost of co-operative work of an educational character along the lines of agricultural, horticultural or domestic science development: Provided, That the scheme or plan of such special work provided for in this section shall have been adopted by the county institute at its last annual session and that competition shall be open to every eligible person of that particular class residing in such county." * * *

The act thus comes very timely to the aid of the County Farmers' Institute Associations which have been making, or contemplate, an effort to interest the boys and girls in the lines mentioned.

While the work contemplated in section 5 of the act is only one branch of the Farmers' Institute work, it is now regarded by progressive institute managements, both general and local, as a very important branch of this work. For this reason the County Farmers' Institute Associations throughout the state should make the most of the opportunity afforded by the new law.

This circular is sent out in the hope that it will prove practically helpful to those County Institute Associations which have already undertaken work in the line contemplated, and, also, give some useful pointers to the other associations that will, a little later, take up the same work.

LOCAL AUSPICES UNDER WHICH CONTESTS MAY BE CONDUCTED.

By the terms of the aforesaid act, the initiative plainly rests with the County Farmers' Institute Associations, but other agencies may co-operate in an effort to interest and encourage the young people. This work may properly be conducted under the following auspices:

1. The County Farmers' Institute Association, including, of course, the Woman's Auxiliary, where one exists.

2. The County Institute Association and the rural schools, under the direction of the county superintendent of schools and his corps of teachers.

3. The County Institute Association and the city, village and township direction of the county superintendent of schools and his corps of teachers.

4. The County Institute Association and Farmers' Clubs, Granges, Agricultural and Horticultural Societies, etc.

The co-operation of school officials and teachers should be solicited for the following reasons:

1. The school men can suggest how to make the contests most truly educational.

2. They can most effectively interest the boys and girls who are still in the public schools.

3. The co-operation of Institute workers and the school officials and teachers will prove of mutual benefit to the schools and the Farmers' Institute work.

4. Through such co-operation the school children will get a more adequate conception of the dignity and importance of agriculture and the value of education to those engaged in agricultural pursuits.

5. The enlisting of the boys and girls of both town and country, in such contests as are contemplated in the recent institute act, will tend greatly to reduce sectional jealousy and unite the rural and urban population in sympathy and effort.

An effort should be made, also, to interest the youth under twenty who have ceased attending school. These may be reached directly by the Farmers' Institute Associations.

WHY AND HOW CONTESTS SHOULD BE CONDUCTED.

I. The following are some of the reasons why contests by the boys and girls should be held:

1. They cultivate and develop the creative and constructive faculties.

2. They apply the education of the book and school to actual life and its problems.

3. They awaken interest, enthusiasm and worthy ambition.

4. They develop the power to do and stimulate the desire to learn how to do better.

5. They add zest to life by awakening interest in nature's processes and in the problems of the field, orchard, garden and life stock.

6. They occupy the mind and hand in laudable endeavor and thus reduce the opportunities for idleness, bad thoughts, and evil associations.

II. Just how contests of various kinds may be best conducted will be determined only through experience. At first, it is not so important *how* to conduct a contest as it is to *actually do the thing* in some way, however imperfect the method of doing may be.

It is hoped that the following suggestions will prove helpful until experience shall have shown a better way.

1. Interest the school teachers and the public spirited business men and farmers. The former will suggest plans and the latter will provide means.

2. Decide at first on some simple plan of contest or competitive exhibit that shall be open to the boys and girls of the county of certain age whether living in town or country.

3. Publish the plan agreed upon early in the local papers so that all may know of it, and have ample time to get ready for the contest.

4. Prepare and send out directly to the boys and girls a circular setting forth, clearly and in detail, the plan of contest and announcing the awards to be made to successful competitors.

5. In adopting the plan of contest, give due attention to the special adaptations of the soil and the prevailing occupations of the people. For example—a corn contest would not be advisable in a locality where fruit is largely grown, a crop growing contest would be unsuitable for city boys and girls, and the school garden contest would be rather out of place in the country.

6. The contest, of whatever kind, should be so conducted as to make it truly and practically educational in character.

7. The awards should be such as will stimulate and gratify the desire for knowledge, training and education. The following will serve as examples of suitable awards to successful competitors:

(1) Books, manuals of instruction—on butter making, corn growing, spraying, etc.—on nature, adventure, travel, biography, history, literature;

(2) Useful articles, as a cultivator, spray pump, churn, milk tester, universal bread maker, etc.;

(3) Excursions to some institution, place or point of interest, as the state fair, international live stock show, stock yards, the experiment station, a Farmers' Institute, or fair in an adjoining county, a lake or river resort, a large creamery, canning factory, orchard, market garden, florist's place, farm, herd, flock or stud;

(4) Scholarships covering the expenses of attending the Farmers' Short Course, Butter Makers' Course, or the Winter School of Agriculture.

FORMS OF CONTESTS THAT MAY BE UNDERTAKEN.

A great variety of contests for either or both boys and girls between the ages of ten and eighteen or twenty years may be undertaken. The following will serve to illustrate: (1) A Corn Growing and Judging Contest; (2) A Corn Improving and Judging Contest; (3) A Crop Growing and Judging Contest; (4) A Fruit Growing and Judging Contest; (5) A Poultry Growing and Judging Contest; (6) A Vegetable Growing and Judging Contest; (7) A Butter Making and Judging Contest; (8) A Bread Making and Judging Contest; (9) A Home Garden Contest for either country or city children; (10) A School Garden Contest for city and village schools.

Each crop contest should include two or more of the following features and may profitably include all, namely: (1) An exhibit of the product (with or without credit for the yield and area of crop grown) to be judged by an expert using the score card; (2) Judging by the exhibitor of an article similar to the one shown; (3) A paper by the exhibitor describing the method of growing the crop and selecting the exhibit, which, also, would be judged by a competent person using the score card therefor.

The fruit, poultry, butter making and bread making contests may prop-

erly include (1) an exhibit of the product, (2) judging by the exhibitor, (3) paper describing the method of growing or making the article exhibited.

GRADED OR CONTINUED CONTESTS.

As a single contest may prove inadequate in getting the boys and girls well started in their efforts to excel, a continued contest may be arranged. Such a contest may include: (1) A competitive exhibit of corn, oats, wheat, butter, bread, etc., open to all the boys and girls of certain ages in the township; (2) A county contest open to those attaining the highest rank in the several classes at the township contests; (3) A state contest open to the competitors taking highest rank in the several classes at the county contests.

The awards in a graded contest of this kind might properly be (1) the paying of the expenses of the successful township competitors while attending the county contest; (2) the paying of the expenses of the successful county contestants while attending the state contest, and (3) the granting of a scholarship in the Farmers' Short Course, in the Practical Butter Makers' Course or in the Winter School of Agriculture to the successful competitors in the state contest. The scholarship would, in each case, cover the expenses of taking one of the courses named.

In case there should be a desire in several localities of the state for a graded contest like that outlined above, the committee on Institutes will be glad to assist in formulating a plan so that the exhibitors may compete under uniform regulations.

SHOULD BOYS' AND GIRLS' CLUBS BE ORGANIZED?

Though not essential to a contest, boys' and girls' clubs will often prove helpful in maintaining continued interest in self-improvement which has been awakened by some form of contest. The County Institute Associations are, however, primarily interested to reach the boys and girls through some form of contest. When they have become interested, organization will naturally follow and should then be encouraged. When formed, these boys' and girls' clubs should be turned over to the school officers and teachers, or to some farmers' organization as a grange, farmers' club, etc. The Farmers' Institute Association will then be free to inaugurate another contest and thus reach a new crop of boys and girls the next year.

The following are some of the young people's organizations that may be formed:

1. A Boys' Corn Club.
2. A Boys' Farm Club.
3. A Boys' Horticultural Club.
4. A Girls' Home Culture Club.
5. A Girls' Cooking and Sewing Club.
6. A Girls' Poultry Club.
7. A Boys' and Girls' Garden Club.

It is believed that these clubs, if formed, should be local organizations with the consolidated school or the township, village, or city high school as the center, and should seldom exceed the limits of a single township.

While, in view of the recent institute act, the present seems an oppor-

tune time to point out how the County Associations may proceed in order to realize the full benefit of the said act, it should be distinctly understood that the suggestions of this circular merely express the desire of the committee on institutes to be helpful to the County Institute Associations.

In several counties of the state, young people's clubs have already been formed and contests of various kinds have been inaugurated and successfully conducted. It will be entirely proper for the County Associations in these counties to follow the plans already adopted.

The County Institute Associations which have not yet formulated any plan of action, under the new law, are at liberty to accept or modify the suggestions of this circular or reject them in favor of some other plan better suited to the conditions and needs of the particular locality. It will be necessary in all cases, however, for the county associations, which desire to take advantage of the provisions of the recent institute act in conducting contests for any class of persons, to conform to that provision of the act which requires that the contest or "competition shall be open to every eligible person of that particular class residing in such county."

INDIANA'S OPPORTUNITY.

The original Institute Act of 1889 supplemented by the amendment of 1901 makes liberal provision for instruction at Farmers' Institutes. The new act of 1907 provides for meeting the local expenses of the County Farmers' Institute Associations and for such incentives to the attainment of excellence in Agriculture and Domestic Art as will strongly appeal to the young people.

The new law also makes compliance of the County Farmers' Institute Associations with the provisions of the original act and the regulations of the governing board, a condition of receiving the benefits contemplated in the act. The new act thus admirably supplements the old, knitting together the work of the general management and of the county organizations.

Under the terms of the several Institute acts, ten thousand dollars (\$10,000.00) is available annually for securing speakers at Farmers' Institutes, holding a conference of the workers, and meeting the expenses of the superintendent's office. When the terms of the new act are fully complied with, two hundred dollars (\$200.00) will be available in each county of the state for meeting the local expenses of the County Association, conducting contests for young people, etc. This means a possible eighteen thousand four hundred dollars (\$18,400.00) in the aggregate for the local expenses of the several county associations throughout the state. It thus appears that ample provision is made for conducting the Farmers' Institute work in Indiana in a thorough-going manner and according to the up-to-date methods of interesting the young people now coming into vogue in the more progressive states of the Union.

Although the recent Institute Act makes very liberal provision for the local expenses of the County Farmers' Institute Associations, one of the conditions of the act is

that there shall be a paid membership as a basis for county aid. This means a radical departure in the method of raising funds for local expenses in most of the counties, and it will, therefore, take some time for the local associations to become organized so as to take full advantage of the provisions of the act of 1907. When these associations become thoroughly organized and get into perfect working condition under the new law, the superiority of the new regime, over the old, will be fully apparent.

The Indiana Farmers' Institute laws are unique in two respects: 1st. In the ample provision that is made for meeting the local expenses of the County Associations. 2d. In the effective co-operation of the general and local Institute managements required by the terms of the several acts.

The new Institute Act, by strengthening the county organizations, makes possible a very substantial advance in the Farmers' Institute work of the state. It is the desire and purpose of the general committee on Institutes to make the most of the opportunity thus afforded to bring Indiana into the foremost rank in the Farmers' Institute work. To this end the prompt, intelligent and effective co-operation of the County Institute organizations throughout the state is desired.

ANNUAL CONFERENCE OF INSTITUTE WORKERS.

The tenth annual conference of Farmers' Institute Workers was held at Purdue University, October 7-8, 1907, and the second Normal Institute was held on the four days immediately following the conference.

Although these meetings occurred after the close of the fiscal year ending September 30, 1907, it seems proper to give the program:

PROGRAM OF CONFERENCE.

Monday, October 7th.

2 to 5 p. m. Delegates will register and be assigned to lodging places.

Guides will accompany all who desire to see the Farm, Live Stock, Laboratories, or Shops.

7:30 p. m. Opening Session, Assembly Room, Mrs. W. J. Sanford, Lebanon, Presiding.

Music, Philalethean Glee Club.

Invocation, Rev. T. J. Bassett, Pastor West Lafayette M. E. Church.

Greeting, President W. E. Stone.

Musical Numbers, Glee Club.

Address—The Industrial Element in Education—Its Place and Value, Professor E. G. Allen, Indianapolis Manual Training School.

Discussion led by Ivy F. Harner, Professor of Household Economics, Purdue University.

Tuesday Morning, October 8th.

J. H. Barrett, Greenfield, Presiding.

9:00 o'clock. Theme: The Work of the County Associations.

(a) Suggestions to the Chairmen, Professor John Hamilton, Farmers' Institute Specialist, Washington, D. C. Questions.

(b) Plans for Raising Local Funds: A symposium by the Chairmen and others.

(1) Those in use.

Discussion led by A. H. Bogue, Lagrange.

(2) Those suggested.

Discussion led by A. L. Pochin, Spencer.

Tuesday Afternoon.

J. W. Grable, Corydon, Presiding.

2:00 o'clock. Theme: Plans for Enlisting the Boys and Girls.

(a) Crop Growing Contests.

Discussion led by William Wood, Ellettsville.

(b) Competitive Exhibits.

Discussion led by E. E. Rodgers, Knox.

(c) Competitive Judging.

Discussion led by G. I. Christie, Experiment Station.

Tuesday Evening.

Mrs. Harry Freed, Clay City, Presiding.

7:30 o'clock. Musical Numbers, Philaethean Glee Club.

Symposium: How Industrial Training May be Given in the Public Schools.

(a) Elementary Agriculture, Professor Fisher, Purdue.

(b) Household Economics, Mrs. Margaret Mather Romine, Mooresville, Ind.

(c) Manual Training, Professor Allen.

Questions and General Discussion.

WOMAN'S CONFERENCE.

Wednesday Morning, October 9th.

Mrs. John L. Oldshue, Waveland, Presiding.

9:00 o'clock. Theme: The Woman's Auxiliary.

(a) Its Relation to the Farmers' Institute Association, Professor Latta.
Questions.(b) Its Work for the Wives and Mothers, Mrs. Romine.
Questions.(c) Its Work for the Daughters, Miss Bertha Melville Miller, Franklin.
Questions and Discussion.

PROGRAM OF NORMAL INSTITUTE.

Wednesday Morning, October 9th.

R. L. Thompson, Topeka, Presiding.

9:00 o'clock. Theme: Fundamentals of Successful Agriculture.

(a) The Soil, Professor A. T. Wiancko, Purdue.
Questions.(b) The Crops, Mr. Christie.
Questions.(c) The Live Stock, Professor J. H. Skinner, Dean School of Agriculture, Purdue.
Questions and Discussion.

Wednesday Afternoon.

J. M. Cantley, Logansport, Presiding.

2:00 o'clock. Theme: Fundamentals of Successful Horticulture.

- (a) Location, Site and Varieties, Professor James Troop, Purdue.
Questions.
 - (b) Culture and Spraying, C. G. Woodbury, Experiment Station.
Questions and Discussion.
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Wednesday Evening.

Mrs. Flora M. Meeks, Parker, Presiding.

7:30 o'clock. Theme: Fundamentals of Successful Dairying.

- (a) Management of the Herd, H. A. Hopper, Experiment Station.
Questions.
 - (b) Care of the Product, Professor O. F. Hunziker, Purdue.
Questions and Discussion.
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Thursday Morning, October 10th.

J. L. Doan, Westfield, Presiding.

9:00 o'clock. Theme: Farm Sanitation.

- (a) Draining and Sewerage, Professor W. C. Latta, Purdue.
Questions.
 - (b) Water Supply, Professor S. Burrage, Purdue.
Questions.
 - (c) Heating and Ventilation, Professor J. D. Hoffman, Purdue.
Questions.
 - (d) Propagation, Distribution and Destruction of Disease Germs, Professor Burrage.
Questions.
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Thursday Afternoon.

J. B. Burris, Cloverdale, Presiding.

2:00 o'clock. Theme: Farm Motors.

- (a) The Wind Engine, Professor Hoffman.
Questions.
- (b) The Steam Engine, Professor G. A. Young, Purdue.
Questions.
- (c) Electric Power and Light, Professor H. T. Plumb, Purdue.
Questions.
- (d) The Gas or Gasoline Engine, Instructor W. N. Nye, Purdue.
Questions.
- (e) Denatured Alcohol, Director Arthur Goss, Experiment Station.
Questions.

Thursday Evening.

E. C. Martindale, Wilkinson, Presiding.

7:30 o'clock. Theme: Our Little Friends and Foes—Lantern Views.

- (a) Insects and Insect Parasites, Mr. Woodbury.
Questions.
 - (b) The Rusts, Smuts, etc., Professor J. C. Arthur, Experiment Station.
Questions.
 - (c) Bacteria, Harmful and Beneficial, Professor Burrage.
Questions and Discussion.
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Friday Morning, October 11th.

A. O. Lockridge, Greencastle, Presiding.

9:00 o'clock. Theme: Combatting Insects and Plant Diseases.

- (a) Affecting Grains and Forage Plants, Professor Fisher.
Questions.
 - (b) Affecting Vegetables and Melons, Mr. Woodbury.
Questions.
 - (c) Affecting Fruits, Professor Troop.
Questions and Discussion.
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Friday Afternoon.

Oliver Kline, Huntington, Presiding.

2:00 o'clock. Theme: Combatting Animal Diseases and Pests.

- (a) Disease-producing Germs and Parasites, (b) Channels of Infection, Instructor C. N. Arnett, Purdue.
Questions.
 - (c) Conditions Favoring Infection, (d) Methods of Combatting Germ Diseases, Professor R. A. Craig, Purdue.
Questions and Discussion.
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Friday Evening.

J. A. Burton, Orleans, Presiding.

7:30 o'clock. Some Lantern Views, Showing Effect of Treatment.

- (a) On Forage Crops, Professor Wiancko.
Questions.
- (b) On Grain Crops, W. P. Kelly, Experiment Station.
Questions.
- (c) On Fruit Crops, Mr. Woodbury.
Questions and Discussion.

Saturday Morning, October 12th.

G. P. Newson, West Newton, Presiding.

9:00 o'clock. Theme: Factors and Conditions of Success on the Farm.

(a) In Commercial Seed Production, Mr. Christie.

Questions.

(b) In Commercial Fruit Growing, Professor Troop.

Questions.

(c) In Commercial Dairying, Professor Hunziker.

Questions.

(d) In Commercial Live Stock Production, W. A. Cochel, Experiment Station.

Questions and Discussion.

PURPOSE OF THE CONFERENCE.

Its purpose is to help the county chairman (1) by suggesting feasible plans for raising funds for local expenses, (2) by pointing out the ways and means of interesting and enlisting the boys and girls,

PURPOSE OF THE NORMAL INSTITUTE.

Its special purpose is to aid the assigned speakers, (1) by setting forth the underlying principles of a permanently prosperous agriculture, (2) by making clear the value of scientific knowledge on the farm, and (3) by pointing out the limitations and adaptations of principles in good farm practice.

WHO ARE EXPECTED TO ATTEND.

Each chairman of a County Farmers' Institute Association, and each president of a County Woman's Auxiliary is expected to attend all the sessions of the conference.

Each personally invited assigned speaker is expected to attend all the sessions of both conference and Normal Institute.

Other speakers and interested persons are cordially invited.

Seventy-eight counties were represented at the conference and Normal Institute. The counties without representation are Delaware, Fayette, Fulton, Greene, Knox, Lake, Marshall, Miami, Owen, Ripley, Rush, Vigo, Wabash and Warren. The number of chairmen or their substitutes present was 72; number of presidents of Woman's Auxiliaries or their substitutes in attendance, 18; number of assigned speakers present, 19; number visitors present, 22. The total number of registered delegates, excluding duplicates, at the conference and Normal Institute was 130.

Owing to a belated train, Mr. Hamilton of Washington, D. C., was unable to be at the conference Tuesday morning

to take the part assigned him. He arrived early Tuesday afternoon and spoke briefly but pointedly, near the close of that session. He gave the chairmen many very pertinent suggestions, and urged upon them the great importance of recognizing the need of giving themselves earnestly to the work in hand. If Mr. Hamilton's suggestions are faithfully carried out by the chairmen who heard him, the Institute work in Indiana will be much improved in many of the counties.

The conference topics of most absorbing interest to the chairmen were plans for raising funds for meeting local expenses and ways and means of interesting and enlisting the boys and girls of the farm. These topics were thoroughly discussed by many of the delegates in attendance, and it is believed that the chairmen carried home many valuable suggestions which will bear fruit in their respective Institutes. The Monday and Tuesday evening sessions were given up entirely to the discussion of industrial education in the public schools. The discussions were listened to with eager interest throughout. The sentiment of the audience relative to industrial training in the public schools found expression in the following preamble and resolutions, which were adopted without dissenting voice:

PREAMBLE AND RESOLUTIONS UNANIMOUSLY ADOPTED BY THE CONFERENCE OF FARMERS' INSTITUTE WORKERS, TUESDAY, OCTOBER 8, 1907.

Whereas, The great majority of the boys and girls of the farm do not acquire an education beyond that given in the home schools; and,

Whereas, These schools do not effectively prepare their students for the life and work of the farm; therefore,

Resolved, That this State Conference of Farmers' Institute Workers commends the action of the State Board of Education in recognizing this need by the preparation of a more appropriate course of study for use in the rural schools.

Resolved, further, That we urge upon the school officials the adoption and use of this course of study.

Resolved, further, That we urge that provisions be made for the better preparation of teachers to give instruction in nature study, elementary agriculture, manual training, and household science.

Resolved, further, That we favor the provision by which professional preparation in the above lines may be recognized among the qualifications of teachers employed in the rural schools.

Resolved, further, That we urge upon Farmers' Institute speakers the

importance of calling attention to the new course of study and its practical value in preparing the boys and girls of the farm for their life work.

Taking it all in all, it is believed the conference was one of the most, if not the most successful, ever held.

The Normal Institute, though not largely attended, proved to be very helpful, indeed, to the speakers present. Speakers remarked again and again upon the great value of the discussions on the various subjects in the program.

The special purpose of the Normal Institute was to add to the equipment of the speakers for their work at the Farmers' Institutes the coming season. If the expressions of the speakers present may be taken as a guide the purpose of the Normal Institute was amply realized. It is therefore hoped and believed that the speakers who were present during most of the sessions of the Normal Institute will be able to do more acceptable and more efficient Institute work than in any previous year.

FARMERS' INSTITUTE MEETINGS ARRANGED FOR THE SEASON OF 1907-08.

Each spring the several chairmen of the County Farmers' Institutes are requested to advise the state superintendent as to the dates and places of meeting, and subjects of assigned speakers desired for the succeeding season.

In arranging the following schedule of meetings for 1907-08, the *expressed* desires of the county chairmen were duly considered in every case and granted so far as consistent with economy and the available time of the assigned speakers.

NOVEMBER.

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
HARRISON, Lanesville.....	Monday, Nov. 18.....	Lockridge.
J. W. Grable, Corydon.....		
HARRISON, Crandall.....	Tuesday, Nov. 19.....	Lockridge.
J. W. Grable, Corydon.....		
JENNINGS, North Vernon.....	Wednesday, Nov. 20...	Miss Miller.
O. F. Phillips, Butlerville.....	Thursday, Nov. 21.....	Professor Wiancko.
DUBOIS, Bird's Eye.....	Wednesday, Nov. 20....	Lockridge.
D. M. Lichlyter, Huntingburg...	Thursday, Nov. 21.....	
DEARBORN, Lawrenceville.....	Wednesday, Nov. 20....	Newsom.
Riley Curtis, Aurora.....	Thursday, Nov. 21.....	

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
MARION, Indianapolis.....	Thursday, Nov. 21.....	Cantley.
J. J. W. Billingsley, Malott Park.	Friday, Nov. 22.....	
HARRISON, DePauw.....	Friday, Nov. 22.....	Lockridge.
J. W. Grable, Corydon.....		
ALLEN, Nine Mile.....	Friday, Nov. 22.....	Martindale.
Frank Hubler, Hoagland.....		
CLARKE, Otisco.....	Friday, Nov. 22.....	Mrs. Lindley (22).
W. P. Bottorff, Charlestown.....	Saturday, Nov. 23.....	Cantley (23).
RIPLEY, Friendship.....	Friday, Nov. 22.....	Newsom.
W. R. Craig, Benham.....	Saturday, Nov. 23.....	Burton.
HARRISON, Palmyra.....	Saturday, Nov. 23.....	Lockridge.
J. W. Grable, Corydon.....		
ALLEN, Huntertown.....	Saturday, Nov. 23.....	Martindale.
Frank Hubler, Hoagland.....		
TIPPECANOE, Monitor.....	Saturday, Nov. 23.....	Professor Skinner.
H. A. Miller, Montmorenci.....		
PERRY, Tell City.....	Monday, Nov. 25.....	Cantley.
J. S. England, Tobinsport.....	Tuesday, Nov. 26.....	Martindale.
KNOX, Bicknell.....	Tuesday, Nov. 26.....	Christie.
Capt. Ellis House, Bicknell.....		Miss Miller.
ALLEN, Poe.....	Tuesday, Nov. 26.....	Smith (26).
Frank Hubler Hoagland.....	Wednesday, Nov. 27.....	Miss Miller (27).
PERRY, Avery's Church.....	Wednesday, Nov. 27.....	Cantley.
J. S. England, Tobinsport.....	Thursday, Nov. 28.....	Martindale.
MONROE, Richland Township.....	Friday, Nov. 29.....	Hopper.
Wm. Wood, Ellettsville.....		
TIPTON, Kempton.....	Friday, Nov. 29.....	Kline.
Clayton Martz, Tipton.....		
WARRICK, Tennyson.....	Friday, Nov. 29.....	Cantley.
S. W. Taylor, Boonville.....		Martindale.
DEKALB, Butler.....	Friday, Nov. 29.....	Lockridge.
J. C. Hodges, Waterloo.....	Saturday, Nov. 30.....	Crane.
ELKHART, Goshen.....	Friday, Nov. 29.....	Benjamin.
W. J. Beasecker, Goshen.....	Saturday, Nov. 30.....	Freeman.
JEFFERSON, Ryker's Ridge.....	Friday, Nov. 29.....	Newsom.
R. H. Wood, Madison.....	Saturday, Nov. 30.....	Miss Miller.
CRAWFORD, English.....	Friday, Nov. 29.....	Burton.
J. R. Lyons, West Fork.....	Saturday, Nov. 30.....	Pochin.
DUBOIS, Holland.....	Saturday, Nov. 30.....	Anderson.
D. M. Lichlyter, Huntingburg.....		Hopper.
PIKE, Winslow.....	Saturday, Nov. 30.....	Martindale.
M. L. Heathman, Petersburg.....		

DECEMBER.

GREENE, Lyons.....	Monday, Dec. 2.....	Newsom.
J. G. Hert, Bloomfield.....		Lockridge.
MARSHALL, Plymouth.....	Monday, Dec. 2.....	Martindale, Thompson (2).
C. W. Newman, Culver.....	Tuesday, Dec. 3.....	Mrs. Romine (3).
JASPER, Wheatfield.....	Monday, Dec. 2.....	Whistler Cantley (2).
Theodore Dunlap, Surrey.....	Tuesday, Dec. 3.....	Miss Miller, (3).
NOBLE, Wolf Lake.....	Tuesday, Dec. 3.....	Thompson.
Wesley Parker, Wolf Lake.....		Sigrist.
VANDEBURGH, McCutchanville.....	Tuesday, Dec. 3.....	Anderson.
W. C. Goldsmith, Evansville.....	Wednesday, Dec. 4.....	Burton.
GREENE, Worthington.....	Tuesday, Dec. 3.....	Newsom.
J. G. Hert, Bloomfield.....	Wednesday, Dec. 4.....	Lockridge.
RUSH, Manilla.....	Wednesday, Dec. 4.....	Kline.
E. E. Hungerford, Rushville.....		
MONROE, Washington Township.....	Wednesday, Dec. 4.....	Crane.
Wm. Wood, Ellettsville.....		
NOBLE, Cromwell.....	Wednesday, Dec. 4.....	Martindale.
Wesley Parker, Wolf Lake.....		Sigrist.
TIPTON, Windfall.....	Wednesday, Dec. 4.....	Cantley.
Clayton, Martz, Tipton.....		
JASPER, Rensselaer.....	Wednesday, Dec. 4.....	Whistler, Miss Miller (4).
Theodore Dunlap, Surrey.....	Thursday, Dec. 5.....	Cantley (5).
RUSH, Milroy.....	Thursday, Dec. 5.....	Kline.
E. E. Hungerford, Rushville.....		
JACKSON, Uniontown.....	Thursday, Dec. 5.....	Crane.
J. Q. Foster, Seymour.....		Anderson.
WHITLEY, Hecla.....	Thursday, Dec. 5.....	Martindale.
J. D. Sherwood, Columbia City.....		
GRANT, Swayzee.....	Thursday, Dec. 5.....	Miss Miller (5).
A. A. Burrier, Marion.....	Friday, Dec. 6.....	Thompson (6).

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
CLAY, Clay City.....	Thursday, Dec. 5.....	Lockridge, Newsom (5).
H. E. Sutton, Clay City.....	Friday, Dec. 6.....	Mrs. Romine (6).
RUSH, Carthage.....	Friday, Dec. 6.....	Kline.
E. E. Hungerford, Rushville.		
ALLEN, Monroeville.....	Friday, Dec. 6.....	Martindale.
C. F. Hubler, Hoagland.....		
DEARBORN, Ebenezer.....	Friday, Dec. 6.....	Newsom.
Riley Curtis, Aurora.....	Saturday, Dec. 7.....	
MARION, Clermont.....	Friday, Dec. 6.....	Cantley.
J. J. W. Billingsley, Malott Park..	Saturday, Dec. 7.....	
BARTHOLOMEW, Columbus.....	Friday, Dec. 6.....	Crane.
W. H. Newsom, Elizabethtown.....	Saturday, Dec. 7.....	Anderson.
RUSH, Arlington.....	Saturday, Dec. 7.....	Lockridge.
E. E. Hungerford, Rushville.....		
HUNTINGTON, Warren.....	Saturday, Dec. 7.....	Martindale.
Omer Summers, Huntington.....		
PARKE, Marshall.....	Monday, Dec. 9.....	Newsom.
Owen Swaim, Marshall.....		Kline.
PUTNAM, Roachdale.....	Monday, Dec. 9.....	Martindale.
G. W. Hanna, Greencastle.....		Cochel.
FLOYD, Edwardsville.....	Monday, Dec. 9.....	Lockridge.
M. V. Hanger, Georgetown.....	Tuesday, Dec. 10.....	
OWEN, Gosport.....	Monday, Dec. 9.....	Burris.
A. L. Pochin, Spencer.....	Tuesday, Dec. 10.....	
CLARKE, Sellersburg.....	Monday, Dec. 9.....	Thompson (9).
W. P. Bottorff, Charlestown.....	Tuesday, Dec. 10.....	Carter, Mrs. (10).
HUNTINGTON, Mt. Etna.....	Tuesday, Dec. 10.....	Cochel.
Omer Summers, Huntington.....		
CLINTON, Seircleville.....	Tuesday, Dec. 10.....	Christie.
D. F. Maish, Frankfort.....		
NOBLE, Cosperville.....	Tuesday, Dec. 10.....	Cantley.
Wesley Parker, Wolf Lake.....		Miss Miller.
WASHINGTON, Pekin.....	Tuesday, Dec. 10.....	Thompson.
Otto Zink, Salem.....		Burton.
OHIO, Mt. Pleasant.....	Tuesday, Dec. 10.....	Anderson.
E. H. Bailey, Aurora, R. R.....	Wednesday, Dec. 11.....	Mrs. Lindley.
DECATUR, Burney.....	Tuesday, Dec. 10.....	Martindale.
Marshall Newhouse, Greensburg.....	Wednesday, Dec. 11.....	Newsom.
HUNTINGTON, Andrews.....	Wednesday, Dec. 11.....	Cochel.
Omer Summers, Huntington.....		
NOBLE, La Otto.....	Wednesday, Dec. 11.....	Cantley.
Wesley Parker, Wolf Lake.....		Miss Miller.
WASHINGTON, Kossuth.....	Wednesday, Dec. 11.....	Thompson.
Otto Zink, Salem.....		Burton.
FLOYD, Grant Line.....	Wednesday, Dec. 11.....	Lockridge.
M. V. Hanger, Georgetown.....	Thursday, Dec. 12.....	
FOUNTAIN, Attica.....	Wednesday, Dec. 11.....	Burris, Smith* (11).
Theodore Meeker, Attica.....	Thursday, Dec. 12.....	Miss Miller (12).
JACKSON, Brownstown.....	Thursday, Dec. 12.....	Crane.
J. Q. Foster, Seymour.....		Newsom.
KOSCIUSKO, North Webster.....	Thursday, Dec. 12.....	Cantley.
A. J. Logan, Warsaw.....		Price.
DECATUR, New Point.....	Thursday, Dec. 12.....	Martindale.
M. Newhouse, Greensburg.....	Friday, Dec. 13.....	Whistler.
MARTIN, Shoals.....	Thursday, Dec. 12.....	Burton.
J. M. Sherfick, Shoals.....	Friday, Dec. 13.....	Mace.
WASHINGTON, Claysville.....	Thursday, Dec. 12.....	Thompson (12).
Otto Zink, Salem.....	Friday, Dec. 13.....	Mrs. Carter (13).
KOSCIUSKO, Etna Green.....	Friday, Dec. 13.....	Cantley.
A. J. Logan, Warsaw.....		Mrs. Young.
WARRICK, Boonville.....	Friday, Dec. 13.....	Mrs. Lindley.
S. W. Taylor, Boonville.....	Saturday, Dec. 14.....	Hopper.
RUSH, Rushville.....	Friday, Dec. 13.....	Burris.
E. E. Hungerford, Rushville.....	Saturday, Dec. 14.....	Anderson.
SHELBY, Shelbyville.....	Friday, Dec. 13.....	Lockridge.
H. M. Moberly, Shelbyville.....	Saturday, Dec. 14.....	Newsom.
FULTON, Rochester.....	Friday, Dec. 13.....	Benjamin.
Ed. S. Fultz, Rochester.....	Saturday, Dec. 14.....	Kline.
MARTIN, Burns City.....	Saturday, Dec. 14.....	Thompson.
J. M. Sherfick, Shoals.....		Burton.
CLINTON, Moran.....	Saturday, Dec. 14.....	Professor Skinner.
D. F. Maish, Frankfort.....		
FRANKLIN, Metamora.....	Saturday, Dec. 14.....	Martindale.
H. M. Stoops, Brookville.....		
HOWARD, New London.....	Saturday, Dec. 14.....	Cantley.
C. L. Cates, Greentown.....		
CLINTON, Colfax.....	Monday, Dec. 16.....	Lockridge.
D. F. Maish, Frankfort.....		

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
PIKE, Stendal.....	Monday, Dec. 16.....	Thompson.
M. L. Heathman, Petersburg.....		
VERMILLION, Dana.....	Monday, Dec. 16.....	Martindale.
Will Eaton, Dana.....	Tuesday, Dec. 17.....	Whistler.
OWEN, Spencer.....	Monday, Dec. 16.....	Burris.
A. L. Pochin, Spencer.....	Tuesday, Dec. 17.....	Mrs. Lindley.
BROWN, Nashville.....	Monday, Dec. 16.....	Cantley.
A. C. Clark, Nashville.....	Tuesday, Dec. 17.....	Newsom.
CLINTON, Kirklín.....	Tuesday, Dec. 17.....	Lockridge.
D. F. Maish, Frankfort.....		
JENNINGS, Lovett.....	Tuesday, Dec. 17.....	Anderson.
O. F. Phillips, Butlerville.....		Miss Miller.
SPENCER, Newtonville.....	Tuesday, Dec. 17.....	Freeman.
J. N. Woodward, Grandview.....		
LAPORTE, Laporte.....	Tuesday, Dec. 17.....	Benjamin, Sigrist (17).
H. W. Henry, Laporte.....	Wednesday, Dec. 18.....	Mrs. Romine (18).
SWITZERLAND, Vevay.....	Tuesday, Dec. 17.....	Pochin.
C. E. W. Brown, Vevay.....	Wednesday, Dec. 18.....	
DAVISS, Odon.....	Tuesday, Dec. 17.....	Hopper (17).
Edgar Feagans, Montgomery.....	Wednesday, Dec. 18.....	Anderson (18).
PIKE, Petersburg.....	Tuesday, Dec. 17.....	Thompson, Burton (17).
M. L. Heathman, Petersburg.....	Wednesday, Dec. 18.....	Miss Miller (18).
SPENCER, Dale.....	Wednesday, Dec. 18.....	Freeman.
J. N. Woodward, Grandview.....		Mace.
BROWN, Sprunica.....	Wednesday, Dec. 18.....	Cantley.
A. C. Clark, Nashville.....		Newsom.
NEWTON, Brook.....	Wednesday, Dec. 18.....	Lockridge.
Hudson Reed, Brook.....	Thursday, Dec. 19.....	Crane.
BARTHOLOMEW, Hope.....	Wednesday, Dec. 18.....	Martindale.
W. H. Newsom, Elizabethtown.....	Thursday, Dec. 19.....	Whistler.
KNOX, Fritchton.....	Wednesday, Dec. 18.....	Mrs. Lindley.
Ellis House, Bicknell.....	Thursday, Dec. 19.....	Burris.
FRANKLIN, Laurel.....	Thursday, Dec. 19.....	Burton.
H. M. Stoops, Brookville.....		
DAVISS, Alfordsville.....	Thursday, Dec. 19.....	Anderson.
Edgar Feagans, Montgomery.....	Friday, Dec. 20.....	
DUBOIS, Huntingburg.....	Thursday, Dec. 19.....	Pochin.
D. M. Lichlyter, Huntingburg.....	Friday, Dec. 20.....	Thompson.
SPENCER, Chrisney.....	Thursday, Dec. 19.....	Mace, Miss Miller (19).
J. N. Woodward, Grandview.....	Friday, Dec. 20.....	Crane (20).
FRANKLIN, St. Peters.....	Friday, Dec. 20.....	Burton.
H. M. Stoops, Brookville.....		
HAMILTON, Westfield.....	Friday, Dec. 20.....	Newsom.
G. L. Mallory, Noblesville.....	Saturday, Dec. 21.....	Lockridge.
KNOX, Oaktown.....	Friday, Dec. 20.....	Mrs. Lindley.
Ellis House, Bicknell.....	Saturday, Dec. 21.....	Burris.
SPENCER, Richland.....	Saturday, Dec. 21.....	Thompson.
J. N. Woodward, Grandview.....		
MADISON, Summittville.....	Saturday, Dec. 21.....	Cantley.
Samuel Maag, Anderson.....		Mrs. Meeks.
OWEN, Patricksburg.....	Monday, Dec. 23.....	Lockridge.
A. L. Pochin, Spencer.....	Tuesday, Dec. 24.....	
HARRISON, Corydon.....	Monday, Dec. 23.....	Anderson.
J. W. Grable, Corydon.....	Tuesday, Dec. 24.....	Mrs. Lindley.
VANDEBURGH, Perry Township.....	Friday, Dec. 27.....	Burton.
W. C. Goldsmith, Evansville.....		
JACKSON, Kurtz.....	Friday, Dec. 27.....	Lockridge.
J. Q. Foster, Seymour.....		Anderson.
VIGO, Pimento.....	Friday, Dec. 27.....	Cantley.
C. B. Rigney, Terre Haute.....	Saturday, Dec. 28.....	Newsom.
WASHINGTON, Salem.....	Friday, Dec. 27.....	Smith.
Otto Zink, Salem.....	Saturday, Dec. 28.....	Mrs. Romine.
MONTGOMERY, Waveland.....	Friday, Dec. 27.....	Martindale, Crane (27).
J. L. Oldshue, Waveland.....	Saturday, Dec. 28.....	Miss Miller (28).
VANDEBURGH, Knight Twp.....	Saturday, Dec. 28.....	Burton.
W. C. Goldsmith, Evansville.....		
TIPPECANOE, Mt. Zion Church.....	Saturday, Dec. 28.....	Professor Fisher.
H. A. Miller, Montmorenci.....		
LAWRENCE, Tunnelton.....	Saturday, Dec. 28.....	Lockridge.
C. G. Colglazier, Bedford.....		Anderson.
MONROE, Bloomington.....	Monday, Dec. 30.....	Whistler (30-31).
Wm. Wood, Ellettsville.....	Tuesday, Dec. 31.....	Miss Miller (31).
.....	Wednesday, Jan. 1.....	Christie (1).

JANUARY.

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
FAYETTE, Everton	Thursday, Jan. 2	Lockridge.
G. E. Scholl, Connersville		Kline.
LAKE, Lowell	Thursday, Jan. 2	Thompson.
S. B. Woods, Crown Point		
HOWARD, Kokomo	Thursday, Jan. 2	Cochel.
C. L. Cates, Greentown	Friday, Jan. 3	Martindale.
PARKE, Rockville	Thursday, Jan. 2	Whistler, Prof. Skinner (2).
Owen Swaim, Marshall	Friday, Jan. 3	Mrs. Carter (3).
BOONE, Lebanon	Thursday, Jan. 2	Cantley, Newsom (2).
W. J. Sanford, Lebanon	Friday, Jan. 3	Mrs. Romine (3).
DAVIESS, Plainville	Thursday, Jan. 2	Maish.
Edgar Feagans, Montgomery	Friday, Jan. 3	
GRANT, Marion	Thursday, Jan. 2	Mrs. Meeks, 2 and 3.
A. A. Burrier, Marion	Friday, Jan. 3	Professor Latta, 3 and 4
ELKHART, Middlebury	Saturday, Jan. 4	
W. J. Beasecker, Goshen	Friday, Jan. 3	Benjamin.
FRANKLIN, Fairfield	Friday, Jan. 3	Kline.
H. M. Stoops, Brookville		
LAKE, St. John	Friday, Jan. 3	Thompson.
S. B. Woods, Crown Point		
GIBSON, Patoka	Friday, Jan. 3	Burris.
A. F. Strain, Princeton	Saturday, Jan. 4	Davis, C.
MONTGOMERY, Ladoga	Friday, Jan. 3	Pochin (3).
J. L. Oldshue, Waveland	Saturday, Jan. 4	Cochel (4), Miss Miller (4).
PUTNAM, Cloverdale	Friday, Jan. 3	Anderson.
G. W. Hanna, Greencastle	Saturday, Jan. 4	
CASS, Galveston	Saturday, Jan. 4	Maish.
E. E. Phillips, Onward		
DEKALB, Butler Township	Saturday, Jan. 4	Cantley.
J. C. Hodges, Waterloo		
ELKHART, Wakarusa	Saturday, Jan. 4	Benjamin.
W. J. Beasecker, Goshen		
FRANKLIN, Mixersville	Saturday, Jan. 4	Kline.
H. M. Stoops, Brookville		
BOONE, Mechanicsburg	Saturday, Jan. 4	Newsom.
W. J. Sanford, Lebanon		
WARREN, Pine Village	Saturday, Jan. 4	Mrs. Carter.
F. B. McBroom, Williamsport	Saturday, Jan. 4	Martindale.
LAKE, Plum Grove	Saturday, Jan. 4	Mrs. Meeks.
S. B. Woods, Crown Point		Thompson.
CASS, Young America	Saturday, Jan. 4	
E. E. Phillips, Onward		Whistler.
DEKALB, Corunna	Monday, Jan. 6	Thompson.
J. C. Hodges, Waterloo		Cantley.
HANCOCK, Shirley	Monday, Jan. 6	Burris.
J. H. Barrett, Greenfield		Mace.
CLAY, Brazil	Monday, Jan. 6	Newsom, Freeman (6).
H. E. Sutton, Clay City	Tuesday, Jan. 7	Miss Miller (7).
KOSCIUSKO, Warsaw	Monday, Jan. 6	Lockridge.
A. J. Logan, Warsaw	Tuesday, Jan. 7	Maish.
MARSHALL, Bremen	Monday, Jan. 6	Martindale.
C. W. Newman, Culver	Tuesday, Jan. 7	
DEKALB, St. Joe	Tuesday, Jan. 7	Cantley.
J. C. Hodges, Waterloo		
LAPORTE, Mill Creek	Tuesday, Jan. 7	Davis, C.
H. W. Henry, Laporte		Kline.
BOONE, Zionsville	Tuesday, Jan. 7	Doan, J. J.
W. J. Sanford, Lebanon		Crane.
CASS, Royal Center	Wednesday, Jan. 8	Miss Miller.
E. E. Phillips, Onward		
LAGRANGE, Lagrange	Wednesday, Jan. 8	Maish, Whistler (8).
A. H. Bogue, Lagrange	Thursday, Jan. 9	Miss Miller (9).
JOHNSON, Greenwood	Friday, Jan. 10	Maish.
I. Newton Brown, Franklin		Mrs. Carter.
DELAWARE, Muncie	Friday, Jan. 10	Newsom.
Mark Swearingen, Muncie	Saturday, Jan. 11	Lockridge.
HANCOCK, Greenfield	Friday, Jan. 10	Cantley, Mrs. Romine (10).
J. H. Barrett, Greenfield	Saturday, Jan. 11	Crane (11).
HENRY, Newcastle	Friday, Jan. 10	Burris, Crane (10).
R. C. Morgan, Knightstown	Saturday, Jan. 11	Mrs. Romine (11).
LAPORTE, Wanatah	Friday, Jan. 10	Thompson.
H. W. Henry, Laporte	Saturday, Jan. 11	Pochin.
MIAMI, Macy	Friday, Jan. 10	Davis, C.
Frank Phelps, Miami	Saturday, Jan. 11	Kline.

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
POSEY, Poseyville.....	Friday, Jan. 10.....	Mrs. Lindley.
Arthur Wasson, Poseyville.....	Saturday, Jan. 11.....	Anderson.
WARREN, West Lebanon.....	Friday, Jan. 10.....	Martindale, Mrs. Meeks (10).
F. B. McBroom, Williamsport.....	Saturday, Jan. 11.....	Cochel (11).
DAVIESS, Washington.....	Friday, Jan. 10.....	Doan, J. J.
Edgar Feagans, Montgomery.....	Saturday, Jan. 11.....	
CASS, Young America.....	Saturday, Jan. 11.....	Whistler.
E. E. Phillips, Onward.....		
JASPER, Remington.....	Saturday, Jan. 11.....	Maish.
Theodore Dunlap, Surrey.....		Mrs. Carter.
DELAWARE, Daleville.....	Monday, Jan. 20.....	Cochel.
Mark Swearingen, Muncie.....		Benjamin.
HUNTINGTON, Clear Creek.....	Monday, Jan. 20.....	Burris.
Omer Summers, Huntington.....		
PORTER, Hebron.....	Monday, Jan. 20.....	Maish.
J. D. Collins, Valparaiso.....		Whistler.
WABASH, Somerset.....	Monday, Jan. 20.....	Kline.
J. W. Lewis, Wabash.....		Cantley.
WARRICK, Newburg.....	Monday, Jan. 20.....	Newsom.
S. W. Taylor, Boonville.....		Anderson.
WHITE, Wolcott.....	Monday, Jan. 20.....	Thompson (20).
T. M. Irelan, Burnettsville.....	Tuesday, Jan. 21.....	Fouts (21).
MORGAN, Mooresville.....	Monday, Jan. 20.....	Martindale.
A. H. Reynolds, Mooresville.....	Tuesday, Jan. 21.....	Crane.
RANDOLPH, Winchester.....	Monday, Jan. 20.....	Burton.
J. E. Lesley, Winchester.....	Tuesday, Jan. 21.....	Christie.
SWITZERLAND, East Enterprise.....	Monday, Jan. 20.....	Lockridge.
C. E. W. Brown, Vevay.....	Tuesday, Jan. 21.....	
DELAWARE, Albany.....	Tuesday, Jan. 21.....	Mrs. Meeks.
Mark Swearingen, Muncie.....		Benjamin.
HUNTINGTON, Roanoke.....	Tuesday, Jan. 21.....	Burris.
Omer Summers, Huntington.....		
WABASH, Laketon.....	Tuesday, Jan. 21.....	Cantley.
J. W. Lewis, Wabash.....		Mrs. Young.
SHELBY, Flat Rock.....	Tuesday, Jan. 21.....	Cochel.
H. M. Moberly, Shelbyville.....		Mace.
WHITE, Headlee.....	Tuesday, Jan. 21.....	Thompson.
T. M. Irelan, Burnettsville.....		
LAKE, Merrillville.....	Tuesday, Jan. 21.....	Miss Miller.
S. B. Woods, Crown Point.....		
MADISON, Pendleton.....	Tuesday, Jan. 21.....	Davis, C.
Samuel Maag, Anderson.....		Freeman.
PORTER, Valparaiso.....	Tuesday, Jan. 21.....	Maish.
J. D. Collins, Valparaiso.....	Wednesday, Jan. 22.....	Mrs. Kline.
GIBSON, Oakland.....	Tuesday, Jan. 21.....	Anderson.
A. F. Strain, Princeton.....	Wednesday, Jan. 22.....	Newsom.
HUNTINGTON, Markle.....	Wednesday, Jan. 22.....	Burris.
Omer Summers, Huntington.....		
RANDOLPH, Union City.....	Wednesday, Jan. 22.....	Whistler.
J. E. Lesley, Winchester.....		Davis, C.
LAKE, Leroy.....	Wednesday, Jan. 22.....	Miss Miller.
S. B. Woods, Crown Point.....		
JOHNSON, Franklin.....	Wednesday, Jan. 22.....	Christie, Mrs. Romine (22).
I. Newton Brown, Franklin.....	Thursday, Jan. 23.....	Whistler (23).
NEWTON, Goodland.....	Wednesday, Jan. 22.....	Cantley.
Hudson Reed, Brook.....	Thursday, Jan. 23.....	Martindale.
SCOTT, Scottsburg.....	Wednesday, Jan. 22.....	Cochel.
O. B. Reid, Scottsburg.....	Thursday, Jan. 23.....	Crane.
WAYNE, Cambridge City.....	Wednesday, Jan. 22.....	Lockridge.
Abner D. Bond, Greensfork.....	Thursday, Jan. 23.....	Thompson.
STEUBEN, Hamilton.....	Thursday, Jan. 23.....	Burris.
D. C. Squires, Orland.....		
TIPPECANOE, Clark's Hill.....	Thursday, Jan. 23.....	Maish.
H. A. Miller, Montmorenci.....		
ADAMS, Berne.....	Thursday, Jan. 23.....	Newsom.
Ed. S. Moses, Decatur.....		Mrs. Carter.
HENDRICKS, Clayton.....	Thursday, Jan. 23.....	Davis, C.
P. K. Christie, Hadley.....		Anderson.
LAKE, Hobart.....	Thursday, Jan. 23.....	Miss Miller.
S. B. Woods, Crown Point.....		
ST. JOE, North Liberty.....	Thursday, Jan. 23.....	Hopper.
W. C. Haines, New Carlisle.....	Friday, Jan. 24.....	Mrs. Meeks.
SHELBY, Morristown.....	Friday, Jan. 24.....	Crane.
H. M. Moberly, Shelbyville.....		Pochin.
PUTNAM, Greencastle.....	Friday, Jan. 24.....	Woodbury.
G. W. Hanna, Greencastle.....	Saturday, Jan. 25.....	Kline.
STEUBEN, Angola.....	Friday, Jan. 24.....	Burris.
D. C. Squires, Orland.....	Saturday, Jan. 25.....	Mrs. Meeks (25).

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
TIPTON, Tipton..... Clayton Martz, Tipton	Friday, Jan. 24.....	Cantley, Mrs. Romine (24).
CLINTON, Frankfort..... D. F. Maish, Frankfort	Saturday, Jan. 25.....	Newsom (25).
FULTON, Akron..... Ed. S. Fultz, Rochester	Friday, Jan. 24.....	Benjamin, Christie (24).
HAMILTON, Noblesville..... G. L. Mallery, Noblesville	Saturday, Jan. 25.....	Pochin (25).
LAWRENCE, Bedford..... C. G. Colglazier, Bedford	Friday, Jan. 24.....	Thompson.
WELLS, Liberty Center..... Henry Falk, Bluffton	Saturday, Jan. 25.....	Martindale, Davis, C. (24).
LAKE, Highlands..... S. B. Woods, Crown Point	Saturday, Jan. 25.....	Crane (25).
LAWRENCE, Fayetteville..... C. G. Colglazier, Bedford	Friday, Jan. 24.....	Anderson.
MORGAN, Paragon..... A. H. Reynolds, Mooresville	Saturday, Jan. 25.....	Mace (25).
WAYNE, Greensfork..... A. D. Bond, Greensfork	Monday, Jan. 27.....	Lockridge
RANDOLPH, Ridgeville..... J. E. Lesley, Winchester	Monday, Jan. 27.....	Cantley.
St. JOE, Wyatt..... W. C. Haines, New Carlisle	Monday, Jan. 27.....	Newsom.
TIPPECANOE, Farmers' Institute..... H. A. Miller, Montmorenci	Tuesday, Jan. 28.....	Maish.
LAKE, Ross..... S. B. Woods, Crown Point	Tuesday, Jan. 28.....	Crane.
MONTGOMERY, New Market..... J. L. Oldshue, Waveland	Tuesday, Jan. 28.....	Martindale.
WHITLEY, Columbia City..... J. D. Sherwood, Columbia City	Tuesday, Jan. 28.....	Whistler.
LAWRENCE, Bryantsville..... C. G. Colglazier, Bedford	Tuesday, Jan. 28.....	Lockridge.
STARKE, Aldine..... A. C. Bolen, Knox	Tuesday, Jan. 28.....	Miss Miller.
WHITE, Chalmers..... T. M. Irelan, Burnettsville	Tuesday, Jan. 28.....	Thompson.
PULASKI, Pulaski..... W. W. Wright, Winamac	Tuesday, Jan. 28.....	Miss Miller.
ADAMS, Decatur..... Ed. S. Moses, Decatur	Tuesday, Jan. 28.....	Martindale.
LAKE, Crown Point..... S. B. Woods, Crown Point	Tuesday, Jan. 28.....	Benjamin.
MONTGOMERY, Wingate..... J. L. Oldshue, Waveland	Tuesday, Jan. 28.....	Crane.
ORANGE, Orleans..... Jesse Burton, Orleans	Tuesday, Jan. 28.....	Lockridge, Mrs. Meeks (29).
WHITE, Idaville..... T. M. Irelan, Burnettsville	Tuesday, Jan. 28.....	Cantley (30).
STARKE, Knox..... A. C. Bolen, Knox	Tuesday, Jan. 28.....	Cantley (29).
TIPPECANOE, Dayton..... H. A. Miller, Montmorenci	Tuesday, Jan. 28.....	Newsom (30).
RIPLEY, Versailles..... W. R. Craig, Benham	Tuesday, Jan. 28.....	Christie.
WELLS, Bluffton..... Henry Falk, Bluffton	Tuesday, Jan. 28.....	Whistler.
WHITE, Monticello..... T. M. Irelan, Burnettsville	Tuesday, Jan. 28.....	Woodbury.
JACKSON, Seymour..... J. Q. Foster, Seymour	Tuesday, Jan. 28.....	Martindale.
	Tuesday, Jan. 28.....	Mrs. Carter.
	Tuesday, Jan. 28.....	Thompson, Miss Miller (30).
	Tuesday, Jan. 28.....	Crane (31).
	Tuesday, Jan. 28.....	Newsom.
	Tuesday, Jan. 28.....	Maish.
	Tuesday, Jan. 28.....	Hopper.
	Tuesday, Jan. 28.....	Cochel.
	Tuesday, Jan. 28.....	Lockridge.
	Tuesday, Jan. 28.....	Benjamin, Mrs. Carter (31).
	Tuesday, Jan. 28.....	Crane (1).
	Tuesday, Jan. 28.....	Woodbury.
	Tuesday, Jan. 28.....	Martindale.

FEBRUARY.

BENTON, Otterbein..... I. E. Switzer, Otterbein	Monday, Feb. 3.....	Maish.
UNION, Liberty..... Oliver Lafanue, Liberty	Monday, Feb. 3.....	Cochel.
BENTON, Boswell..... I. E. Switzer, Otterbein	Tuesday, Feb. 4.....	Burris, Cantley (3).
DEARBORN, Dillsboro..... Riley Curtis, Aurora	Tuesday, Feb. 4.....	Miss Miller (4).
FULTON, Kewanna..... Ed. S. Fultz, Rochester	Tuesday, Feb. 4.....	Davis, C.
	Tuesday, Feb. 4.....	Cochel.
	Tuesday, Feb. 4.....	Cantley (4).
	Tuesday, Feb. 4.....	Hopper (5).
	Tuesday, Feb. 4.....	Maish.

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
ALLEN, Hoagland..... Frank Hubler, Hoagland.....	Wednesday, Feb. 5....	Christie.
BENTON, Wadena..... I. E. Switzer, Otterbein.....	Wednesday, Feb. 5....	Lockridge Smith.
FRANKLIN, New Trenton..... H. M. Stoops, Brookville.....	Wednesday, Feb. 5....	Cantley.
MONTGOMERY, Crawfordsville..... J. L. Oldshue, Waveland.....	Wednesday, Feb. 5....	Newsom. Miss Miller.
GRANT, Fairmount..... A. A. Burrier, Marion.....	Wednesday, Feb. 5.... Thursday, Feb. 6....	Mrs. Lindley (5). Maish (6).
FRANKLIN, Mt. Carmel..... H. M. Stoops, Brookville.....	Thursday, Feb. 6....	Cantley.
CASS, Lucerne..... E. E. Phillips, Onward.....	Thursday, Feb. 6....	Benjamin.
PARKE, Bellmore..... Owen Swain, Marshall.....	Thursday, Feb. 6....	Crane. Miss Miller.
FAYETTE, Connorsville..... Geo. B. Scholl, Connorsville.....	Thursday, Feb. 6.... Friday, Feb. 7....	Christie. Lockridge.
FRANKLIN, Brookville..... H. M. Stoops, Brookville.....	Friday, Feb. 7....	Cantley.
CASS, Walton..... E. E. Phillips, Onward.....	Friday, Feb. 7....	Benjamin.
HENRY, Lewisville..... R. C. Morgan, Knightstown.....	Friday, Feb. 7....	Cochel. Maish.
HENRY, Middletown..... R. C. Morgan, Knightstown.....	Saturday, Feb. 8....	Maish. Davis, C.
FOUNTAIN, Veedersburg..... Theodore Meeker, Attica.....	Saturday, Feb. 8....	Cantley. Newsom.
CASS, Lake Cicot..... E. E. Phillips, Onward.....	Saturday, Feb. 8....	Benjamin.
WHITLEY, Larwill..... J. D. Sherwood, Columbia City.....	Monday, Feb. 10....	Lockridge.
MARION, West Newton..... J. J. W. Billingsley, Malott Park.....	Monday, Feb. 10.... Tuesday, Feb. 11....	Maish.
SULLIVAN, Pleasantville..... W. A. Gobin, Carlisle.....	Monday, Feb. 10.... Tuesday, Feb. 11....	Anderson. Cantley.
ST. JOE, New Carlisle..... W. C. Haines, New Carlisle.....	Tuesday, Feb. 11....	Benjamin.
TIPPECANOE, Battle Ground..... H. A. Miller, Montmorenci.....	Tuesday, Feb. 11....	Lockridge.
ALLEN, Maysville..... Frank Hubler, Hoagland.....	Tuesday, Feb. 11.... Wednesday, Feb. 12....	Miss Miller (11). Thompson (12).
BLACKFORD, Hartford City..... L. L. Forkner, Hartford City.....	Tuesday, Feb. 11.... Wednesday, Feb. 12....	Martindale, Crane (11). Miss Miller (12).
MARSHALL, Culver..... C. W. Newman, Culver.....	Wednesday, Feb. 12....	Benjamin.
TIPPECANOE, Romney..... H. A. Miller, Montmorenci.....	Wednesday, Feb. 12....	Mrs. Kline. Lockridge.
GREEN, Bloomfield..... J. G. Hert, Bloomfield.....	Wednesday, Feb. 12.... Thursday, Feb. 13....	Cantley. Anderson.
JAY, Portland..... H. D. Peters, Portland.....	Wednesday, Feb. 12.... Thursday, Feb. 13....	Newsom, Burris (12). Miss Miller (13).
PORTER, McCool..... J. D. Collins, Valparaiso.....	Thursday, Feb. 13....	Thompson.
ELKHART, Elkhart..... W. J. Beasecker, Goshen.....	Thursday, Feb. 13.... Friday, Feb. 14....	Mrs. Kline. Martindale.
HUNTINGTON, Huntington..... Omer Summers, Huntington.....	Thursday, Feb. 13.... Friday, Feb. 14....	Burris.
MARION, Oaklandon..... J. J. W. Billingsley, Malott Park.....	Thursday, Feb. 13.... Friday, Feb. 14....	Lockridge.
CARROLL, Delphi..... J. W. F. Thomas, Delphi.....	Friday, Feb. 14....	Whistler.
ORANGE, Orangeville..... Jesse Burton, Orleans.....	Friday, Feb. 14....	Anderson. Newsom.
MADISON, Anderson..... Samuel Maag, Anderson.....	Friday, Feb. 14.... Saturday, Feb. 15....	Maish, Mrs. Kline (14). Lockridge (15). Mrs. Romine (14).
CASS, Logansport..... E. E. Phillips, Onward.....	Friday, Feb. 14.... Saturday, Feb. 15....	Smith (15).
CARROLL, Yeoman..... J. W. F. Thomas, Delphi.....	Saturday, Feb. 15....	Whistler.
ORANGE, Paoli..... Jesse Burton, Orleans.....	Saturday, Feb. 15....	Anderson. Newsom.
STEUBEN, Orland..... D. C. Squires, Orland.....	Saturday, Feb. 15....	Martindale.
HENDRICKS, Pittsboro..... P. K. Christie, Hadley.....	Monday, Feb. 17.... Tuesday, Feb. 18....	Maish (17). Cochel (18).
JEFFERSON, Deputy..... R. H. Wood, Madison.....	Monday, Feb. 17.... Tuesday, Feb. 18....	Burton. Anderson.

Place of Meeting and Chairman of Institute.	Date.	Assigned Speakers.
HOWARD, Greentown.....	Tuesday, Feb. 18.....	Maish.
C. L. Cates, Greentown.....		
LAGRANGE, Shipshewana.....	Tuesday, Feb. 18.....	Lockridge.
A. H. Bogue, Lagrange.....		
STEUBEN, Salem Center.....	Tuesday, Feb. 18.....	Kline.
D. C. Squires, Orland.....		
WARREN, Foster.....	Tuesday, Feb. 18.....	Davis, C.
F. B. McBroom, Williamsport.....		Whistler.
CLARKE, Prather.....	Tuesday, Feb. 18.....	Newsom, Miss Miller (18).
W. P. Bottorff, Charlestown.....	Wednesday, Feb. 19.....	Mace (19).
JENNINGS, Scipio.....	Wednesday, Feb. 19.....	Anderson.
O. F. Phillips, Butlerville.....		Miss Miller.
LAGRANGE, Lima.....	Wednesday, Feb. 19.....	Lockridge.
A. H. Bogue, Lagrange.....		
CARROLL, Deer Creek.....	Wednesday, Feb. 19.....	Maish.
J. W. F. Thomas, Delphi.....		
WABASH, Wabash.....	Wednesday, Feb. 19.....	Cantley.
J. W. Lewis, Wabash.....	Thursday, Feb. 20.....	Whistler.
LAGRANGE, South Milford.....	Thursday, Feb. 20.....	Lockridge.
A. H. Bogue, Lagrange.....		
CARROLL, Camden.....	Thursday, Feb. 20.....	Maish.
J. W. F. Thomas, Delphi.....		
SULLIVAN, Carlisle.....	Thursday, Feb. 20.....	Burris.
W. A. Gobin, Carlisle.....	Friday, Feb. 21.....	Anderson.
HENDRICKS, Danville.....	Thursday, Feb. 20.....	Christie, Miss Miller (20).
P. K. Christie, Hadley.....	Friday, Feb. 21.....	Davis, C. (21).
SWITZERLAND, Moorefield.....	Thursday, Feb. 20.....	Newsom.
C. E. W. Brown, Vevay.....	Friday, Feb. 21.....	
KOSCIUSKO, Sydney.....	Friday, Feb. 21.....	Maish.
A. J. Logan, Warsaw.....		Benjamin.
LAGRANGE, Topeka.....	Friday, Feb. 21.....	Lockridge.
A. H. Bogue, Lagrange.....		
ST. JOE, Walkerton.....	Friday, Feb. 21.....	Kline.
W. C. Haines, New Carlisle.....		Whistler.
CARROLL, Burlington.....	Friday, Feb. 21.....	Cochel.
J. W. F. Thomas, Delphi.....		
MIAMI, Peru.....	Friday, Feb. 21.....	Cantley, Mrs. Romine (21).
Frank Phelps, Miami.....	Saturday, Feb. 22.....	Benjamin (22).
WELLS, Petroleum.....	Saturday, Feb. 22.....	Maish.
Henry Falk, Bluffton.....		Crane.
CARROLL, Ockley.....	Saturday, Feb. 22.....	Cochel.
J. W. F. Thomas, Delphi.....		
BENTON, Fowler.....	Monday, Feb. 24.....	Whistler, Christie (24)
I. E. Switzer, Otterbein.....	Tuesday, Feb. 25.....	Miss Miller (25).
CARROLL, Flora.....	Monday, Feb. 24.....	Lockridge.
J. W. F. Thomas, Delphi.....	Tuesday, Feb. 25.....	
FOUNTAIN, Kingman.....	Tuesday, Feb. 25.....	Cantley.
Theodore Meeker, Attica.....		Davis, C.
TIPPECANOE, Wea.....	Wednesday, Feb. 26.....	Burris.
H. A. Miller, Montmorenci.....		
JAY, Pennville.....	Wednesday, Feb. 26.....	Martindale.
H. D. Peters, Portland.....	Thursday, Feb. 27.....	Mrs. Meeks.
PULASKI, Winamac.....	Wednesday, Feb. 26.....	Whistler, Miss Miller (26).
W. W. Wright, Winamac.....	Thursday, Feb. 27.....	Benjamin (27).
TIPPECANOE, Montmorenci.....	Thursday, Feb. 27.....	Burris.
H. A. Miller, Montmorenci.....		
ALLEN, Fort Wayne.....	Thursday, Feb. 27.....	Thompson
Frank Hubler, Hoagland.....		Miss Miller.
POSEY, Mt. Vernon.....	Thursday, Feb. 27.....	Christie.
Arthur Wasson, Poseyville.....	Friday, Feb. 28.....	Lockridge.
VIGO, Ellsworth.....	Thursday, Feb. 27.....	Crane.
C. B. Rigney, Terre Haute.....	Friday, Feb. 28.....	Davis, C.
CRAWFORD, Grantsburg.....	Thursday, Feb. 27.....	Anderson.
J. R. Lyons, West Fork.....	Friday, Feb. 28.....	Mrs. Lindley.
WELLS, Uniondale.....	Friday, Feb. 28.....	Martindale.
Henry Falk, Bluffton.....		
TIPPECANOE, West Point.....	Friday, Feb. 28.....	Burris.
H. A. Miller, Montmorenci.....		

ACKNOWLEDGMENTS.

In behalf of the general committee on Farmers' Institutes, the undersigned gratefully acknowledges the courtesy and kindness of the general and local papers in publishing announcements and reports of the Farmers' Institute work, and the cordiality with which the Farmers' Institute officers and speakers have co-operated to make the work of the year a success.

W. C. LATTA,

Superintendent Farmers' Institutes.

Purdue University, Lafayette, Ind., Nov. 7, 1907.

FIFTY-NINTH ANNUAL REPORT

OF THE

Board of Trustees and Superintendent

OF THE

CENTRAL INDIANA HOSPITAL
FOR INSANE

At Indianapolis, Ind.

For the Fiscal Year Ending September 30, 1907

TO THE GOVERNOR

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING

1908



THE STATE OF INDIANA, }
EXECUTIVE DEPARTMENT, }
December 27, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE, }
INDIANAPOLIS, January 7, 1908. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

Returned by the Auditor of State, with above certificate, and transmitted to the Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, January 8, 1908.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer January 14, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.

OFFICERS OF THE INSTITUTION.

MEMBERS OF THE BOARD OF TRUSTEES....	D. H. David, President. Adam Heimberger, Vice President. Thomas H. Clifton, Secretary. Eli Marvin, Treasurer.
SUPERINTENDENT	Geo. F. Edenharter, M. D.
MATRON	Marion E. Edenharter.
ASSISTANT PHYSICIANS, DEPARTMENT FOR	
MEN	P. J. Watters, M. D. F. M. Wiles, M. D.
ASSISTANT PHYSICIANS, DEPARTMENT FOR	
WOMEN	Sarah Stockton, M. D. Max A. Bahr, M. D. J. J. Hoffman, M. D.
PATHOLOGIST	Chas. C. Manger, M. D.
ASSISTANT PATHOLOGIST	Ernest D. Martin, M. D.
INTERNE	L. W. Tindolph, M. D.
STEWARD	Simon P. Neidigh.
SECRETARY	Cornelius Mayer.
RECORD CLERK	Evangeline M. Smith.
BOOKKEEPER	Edmund B. Noel. Wm. E. Cochran.
STOREKEEPER	Wilbur G. Austin.
PHARMACIST	James C. Jamison.
CHIEF CARPENTER	William F. Cobb.
CHIEF ENGINEER	Edward E. Frost.

REPORT OF THE BOARD OF TRUSTEES.

HON. J. FRANK HANLY, *Governor of Indiana*:

Sir—We, the Trustees of the Central Indiana Hospital for the Insane, do now submit our report for the fiscal year ending September 30, 1907. We call attention to the fact that by an act of the last General Assembly, it was provided that the fiscal year should end upon September 30th, instead of October 31st, of each year as heretofore. Therefore, in considering the amounts expended from the various appropriations, it should be remembered that such expenditures are for the period of eleven months only, instead of one year as heretofore.

We also present with this report, the report made to us by Superintendent Edenharter, in which is set forth a statement in detail of all matters concerning the maintenance of the Institution during the period covered by this report, including an itemized statement of all expenditures. We especially invite your attention to the Superintendent's report in connection with our own.

PROPERTY.

An appraisement of the real estate belonging to the Institution shows the same value as that of a year ago, while there is a slight decrease in the value of the personal property. Said appraisement is as follows:

Real estate	\$1,634,250 00
Personal property	372,115 81
Total	\$2,006,365 81

PATIENTS.

The number of patients who have been under our care at the Institution during the past year, with the corresponding numbers of the two preceding years, is as follows:

	1905.	1906.	1907.
Total number at beginning of year.....	1,982	2,070	1,976
Number received during year.....	553	441	382
Number discharged during year.....	271	373	206
Number died during year.....	194	162	117
Total number treated during year.....	2,535	2,702	2,358
Number on rolls at close of year.....	2,070	1,976	2,035
Average daily number actually present....	1,832.97	1,858.88	1,837.99

In our former reports we have commented upon the crowded condition of the Institution. You will observe that this condition still continues. We cannot hope for relief in this regard until the completion of the new hospital at Madison, Indiana.

APPROPRIATIONS AND EXPENDITURES.

The regular appropriations made by the last General Assembly for the support of the Institution during the full fiscal year were as follows:

Maintenance (regular)	\$300,000 00
With \$160 extra for each person actually present over a daily average number of 1,788 inmates each month.	
Repairs	25,000 00
Clothing	14,000 00

ACTUAL APPROPRIATIONS AND EXPENDITURES.

The General Assembly having changed the date for the ending of the fiscal year from October 31st to September 30th, therefore the appropriations set apart for the use of the Institution were estimated upon the basis of eleven months instead of twelve, and a deduction of one-twelfth of the amount of each of the above regular appropriations must be made in determining the funds set apart for the use of the Institution up to the date of this report.

Taking this into consideration, the appropriations for this period, with the amount of expenditures therefrom, would be as follows:

Maintenance (regular)	\$275,000 00
With \$160 extra for each person actually present over a daily average number of 1,788 inmates each month, which, upon the basis of the daily average present for the past eleven months, made the additional sum of.....	6,903 70
Total	\$281,903 70
Amount expended therefrom	278,325 08
Balance unexpended	\$3,578 62
Repairs	\$22,916 67
Amount expended therefrom	21,774 35
Balance unexpended	\$1,142 32
Clothing	\$12,833 33
Amount expended therefrom.....	12,793 58
Balance unexpended	\$39 75

These several balances, by operation of law, reverted to the general fund in the State Treasury.

SALE OF WASTE MATERIAL.

The waste material sold from the Institution during the past eleven months amounted to \$2,022.76, which sum has been paid into the State Treasury.

MAINTENANCE PER CAPITA.

The per capita cost for the maintenance of the patients at the Institution during the past eleven months, based upon the daily average number actually present, was \$151.42. In estimating the per capita cost for maintenance, the same is always based upon the daily average number of patients actually present in the Institution, when in fact it should be estimated upon the basis of the daily average number enrolled, including those who are absent. They should be included, for the reason that the Institution is compelled to incur constant expense in communication with them while away. By including them in the number constituting the basis for this calculation, the per capita cost would be considerably reduced.

IMPROVEMENTS MADE.

In our last annual report we requested that specific appropriations be made by the General Assembly for electrical equipment, painting, plumbing, fire protection and cement work. All of these appropriations were made in the several amounts requested, and the improvements for which they were requested will add to the betterment of the general condition of the Institution.

GENERAL CONDITION.

Since our last report constant care has been given to the general improvement of the various departments of the Institution, and the high standard maintained in previous years has been continued to the present time. The patients have been comfortably cared for and excellent discipline has been maintained.

We again wish to acknowledge the great service rendered by Superintendent George F. Edenharter. His devotion to the work of caring for the Institution is deserving of our commendation.

We wish to thank you for the personal interest taken by you in our work, and also to express our appreciation of the prompt action of the last General Assembly in complying with our requests concerning the needs of the Institution.

Respectfully submitted,

D. H. DAVIS, President,

ADAM HEIMBERGER, Vice-President,

THOMAS A. CLIFTON, Secretary,

ELI MARVIN, Treasurer,

Board of Trustees.

Indianapolis, September 30, 1907.

REPORT OF THE SUPERINTENDENT.

To the Honorable Board of Trustees:

Gentlemen—In submitting to you my report for the fiscal year 1906-1907, I insert, as an introduction to the same, and for your convenience, the following abstract of the statistical tables:

At the beginning of the fiscal year there were 1,976 patients—877 men and 1,099 women—enrolled on the records. At the close of the year we had remaining 2,035 patients—909 men and 1,126 women. In last year's report I mentioned that we had to reject all persons when the commitment papers showed a chronic and harmless condition, to relieve the overcrowded condition of the institution. Nevertheless, the number has again increased within 35 of the number of patients enrolled at the beginning of 1905-1906 fiscal year.

Three hundred and eighty-two patients—222 men and 160 women—were admitted during the year; 206 patients—127 men and 79 women—were discharged; and 117 patients—63 men and 54 women—died. Of the 382 patients admitted, 80 were recommitments.

Two thousand three hundred and fifty-eight patients were under treatment during the year—1,099 men and 1,259 women; the daily average number of patients actually present (not counting those absent on furlough) during the year was 1,837.995 patients.

The percentage of recoveries to the total number of patients under treatment is 4.707; the percentage of recoveries to the number admitted during the year is 29.319. The percentage of deaths is 4.962.

We have in this report, as in the one of last year, at the request of the National Conference of Charities and Correction, inserted an additional table.

CASUALTIES.

During the past year we had three suicides.

ESCAPES.

Fourteen patients escaped during the year; six were returned and three were discharged while at home.

POPULATION.

The report for September 31, 1907, shows the population as follows:

Normal capacity, 1,605 bedsteads.

Forced capacity, 1,748 bedsteads.

Patients enrolled, 2,035.

Patients present, 1,859.

Patients furloughed, 176.

An analysis of this table shows that we have in use 143 more bedsteads than our normal capacity.

That we have enrolled 430 more patients than our normal capacity and 287 more than our forced capacity.

That we have actually present 254 more patients than our normal capacity and 111 more than our forced capacity.

These 111 patients are slept upon mattresses wherever we can find room or floor space.

It should be borne in mind that quite a number of those on furlough are liable to return at any time and that we must admit them.

This overcrowded condition is a bar to the proper classification of patients and deprives them of the surroundings necessary for their proper treatment.

It also prevents the employes from having the necessary accommodations.

Under the circumstances we have been compelled, much to our regret, to refuse admission to many cases.

The various counties must assist us in caring for the insane until the hospital at Madison, Ind., is completed.

We shall continue to handle emergencies as best we can, but we have reached the stage where we dare not assume greater responsibilities.

IMPROVEMENTS AND REPAIRS.

Following the custom in vogue from year to year we mention the following improvements and repairs:

The list of items under this heading could be carried to an extreme length; we insert only the more important ones. The invoices will show the extent and cost of same.

Power House—One commutator for the Edison bi-polar generator was purchased. Many small repairs were made.

The duplex pump was given a thorough overhauling.

One new deep-well pump was installed.

Brick Work—The large smoke stack at the Department for Women was partially torn down and repaired, its condition having become dangerous to life and property.

The chimneys at the men's building were also repaired.

The furnace which is used for the destruction of rubbish was practically rebuilt.

Cement Work—The floors in the bathrooms in both departments were torn out and replaced.

Carpenter Work—In all of the bathrooms at the Department for Women new joists were put in.

A new grape arbor was constructed near the conservatory.

The coal chute in the boilerhouse was rebuilt and an enclosed walk to the coal conveyors was constructed.

New ceilings were put in the meat boxes at the cold storage plant.

New floors were placed in some of the wards at the men's building.

Cold Storage—One automatic dumper and can filler was purchased for the ice plant.

Elevators—A number of repairs were made to the elevators.

Heater—The large water heater at the men's building was given a complete overhauling.

Tin and Slate Work—All of the tin and slate work on both of the main buildings was placed in good repair.

Fire Extinguishers—Quite a number of these were purchased.

Linoleum—All of the employes rooms at the Store Building were provided with this material.

Painting—All of the rooms at the Store Building and at the Fire Department were painted. Also, some of the wards at the Department for Men and the new barber shop.

Bakery Equipment—A new outfit of machinery was purchased for this building.

MEDICAL STAFF.

On this date the medical staff consists of the following physicians:

P. J. Watters, M. D.
 F. M. Wiles, M. D.
 Sarah Stockton, M. D.
 Max Bahr, M. D.
 J. J. Hoffman, M. D.
 L. W. Tindolph, M. D., Interne.
 C. C. Manger, M. D., Ph. G., Pathologist.
 E. D. Martin, M. D., Assistant Pathologist.

Dr. L. W. Tindolph entered the service as Interne August 26, 1907.

Dr. Chas. C. Manger entered the service as Pathologist July 13, 1907.

Dr. J. A. MacDonald entered the service of this institution on October 1, 1903, and resigned his position to enter private practice in Indianapolis on July 31, 1907.

His service here was characterized by gentlemanly conduct and strict attention to his professional and other duties.

PATHOLOGICAL DEPARTMENT.

We regret that circumstances prevent us from reporting much work in this department for the last fiscal year.

The lectures to the students were given as usual, but in the absence of a regular pathologist the greater part of the year, some of the systematic work had to be abandoned.

In addition to this the permissions granted by relatives for autopsies were exceedingly limited.

Under the rule of the hospital no autopsies are held, except in coronial cases, without such permission.

The medical staff did considerable work, but owing to their many other duties it was impossible for them to devote much time to it.

The following report is submitted:

PATHOLOGIST'S REPORT.

September 30, 1907.

George F. Edenharter, M. D., Superintendent, Central Hospital for the Insane:

Dear Sir—I beg to submit the following brief report from the pathological department for the year ending September 30, 1907.

The report includes records of ten autopsies, five of which were made since I took charge of the department in the latter part of July.

The histological findings and comparative study of all the findings in these cases will be reviewed in our next report.

Examinations of blood, secretions, and bacteriological experiments have been made at the frequent requests of the staff physicians, and due records kept of the same.

During a part of the year the staff meetings and course of lectures to medical students on the subject of neuropathology, as outlined in former reports, have been continued.

We have started upon original experimental clinical laboratory work, the results of which will be reported upon from time to time.

219. Male, age 41. First admission. Psychosis: Chronic paranoia. Reported as having delusions of estates in Europe, ranches in the west, going to marry the President's daughter. Believed that he was descended from a noble family.

Duration of psychosis: Unknown.

Cause of death: Gastric carcinoma.

Clinical report: Admitted August, 1906, with psychosis of chronic paranoia. Physical condition prior to admission poor, having then recently been operated upon for ankylosed joints. Hips, knees and ankles ankylosed, the right limb straight and the left flexed at hip and knee. There was cardiac hypertrophy, polyuria with hyaline casts. In 1904-05 there was evidence of tuberculosis which, however, disappeared. Six months before death there developed epigastric tenderness, anorexia, irregular vomiting of large quantities of turbid fluid containing blood, evidence of pyloric obstruction and great pain. This was later relieved and followed by lenteric stools, passing to uncontrollable diarrhea, intermittent vomiting, emaciation, cachexia, palpable tumor and anasarca. Blood examination gave characteristics of secondary anasarca. Stomach contents contained a trace of lactic and no hydrochloric acid. Mental condition continued about the same as on admission.

Pathological report: Chronic meningitis, gastric carcinoma with metastasis through lymphatics, general arteriosclerosis, hydropericardium, left pleural adhesions, cartilaginous calcareous deposit and local emphysema of left lung, chronic nephritis, fatty liver, edema of lower limbs, ankylosis of hips, knees and ankles.

220. Male. Age 58. First admission. Psychosis: Subacute mania. Reported weak-minded, immoral, intemperate, indolent. Onset in 1889; began preaching, singing; was filthy, poorly clad; given to attacking and striking citizens.

Duration of psychosis: Seventeen years.

Cause of death: Pulmonary edema, diabetes, chronic nephritis.

Clinical report: Admitted October, 1890. After admission tendency to violence and noisiness rapidly disappeared. There developed hallucinations of sight and hearing, he became quiet and did work on the wards. Physically, condition was apparently good until ten days before death when a carbuncle appeared on the back of the neck. On the morning of his death he returned to bed after breakfast at 7 a. m., complaining of feeling sick. He became restless, rolled and tossed in bed, dyspnea and profuse perspiration developed, and he died at 8 a. m.

Pathological report: Chronic meningo-encephalitis, chronic external hydrocephalus, general cerebral atrophy, granular ependyma, chronic pleuritic adhesions, pulmonary edema, bilateral hydrothorax, cardiac hypertrophy, hyperplasia of bronchial and general lymphatic glands, extensive general arteriosclerosis and atheroma, enlarged thyroid and thyroid adenoma, cirrhosis of liver, chronic arteriosclerotic nephritis, chronic gastritis, venous engorgement of abdominal viscera, splenic hyperplasia, carbuncles.

221. Male. Age 38. Admission. Psychosis: Primary dementia. Reported feeble-minded, intemperate, suicidal and had a mania for breaking glass.

Duration of psychosis: Unknown.

Cause of death: Chronic adhesive pericarditis.

Clinical report: Admitted August, 1903. After admission there were periods of mild excitement and several attempts at suicide. Physical health apparently good until about three months prior to death, when edema of feet developed, followed by general anasarca, dyspnea, etc.

Pathological report: Chronic meningitis, chronic adhesive pericarditis with obliteration of pericardial cavity, cardiac hypertrophy and dilatation, chronic endocarditis, slight valvular sclerosis, dilatation of aorta, moderate arteriosclerosis and atheroma, chronic bilateral pleuritic adhesions, localized acute pleurisy right side, sero-pyo thorax right side, obliteration of left cavity, pulmonary edema, hyperplasia of bronchial glands, cystic thyroid, perihepatitis and pericholecystitis, nutmeg liver, chronic gastritis, chronic nephritis, hypertrophied prostate.

222. Male. Age 44. First admission. Psychosis: Epileptic mania. Reported physical condition good and no mental disturbance, previous to March 5, 1905, though he had epilepsy.

Duration of psychosis: Two years.

Cause of death: Fractured skull.

Clinical report: Admitted September, 1905. On admission there was maniacal excitement. While in hospital has had frequent convulsions, followed by periods of maniacal excitement. Novem-

ber 13, 1906, at about 10 a. m., fell in convulsions, the occiput striking cement floor. Unconsciousness continued. Another convulsive seizure occurred at 12:30 p. m., the coma deepened and death ensued at 7:50 p. m. There exuded from left ear blood and cerebro-spinal fluid.

Pathological report: Hemorrhage from left ear. Cranial bones thin, almost entire absence of diploe. An extensive subepicranial hematoma over temporo-occipital region on left side. There is linear fracture extending along lambdoidal suture, across petrous portion of right temporal as a faint crack, and across the petrous portion on the left as a marked fracture, the bone being considerably shattered. There was considerable extradural blood mixed with cerebro-spinal fluid, in the posterior fossa at the base, and in the left middle fossa extending up the side, compressing the brain. There was marked softening, particularly of the temporal lobe, the optic thalamus, corpus striatum of the left side, and the brain substance overlying the hemorrhage at the base.

233. Male. Aged 41. Second admission. Psychosis: Acute melancholia, secondary dementia. Reported December, 1902. Duration of mental condition had been three weeks, melancholy, restless, sleepless, suicidal, inflicted severe scalp wounds with a stone; cause, ill health.

Discharged on furlough, May, 1903.

Duration of psychosis: Four years.

Cause of death: Lobar pneumonia, purulent meningitis.

Clinical report: Admitted second time January, 1904, reported suicidal, restless, sleepless, obscene, wanders from home, depressed. On admission showed mental deterioration, especially memory and orientation faulty. Much confused, more at night. Some remaining delusional content was evident, apparently of a persecutory type, but this was vague. No psychomotor increase nor megalomania. Physical examination pointed indirectly to an organic psychosis, since there was some locomotor inco-ordination, inequality of pupils with impaired reaction to light, and noticeable speech defect. General nutrition poor and he failed progressively. During the winter had a few general convulsive seizures, after which the dementia became more prominent, and sphincter disturbances appeared. Lumbar puncture at this time showed a lymphocytosis of cerebro-spinal fluid with increase of albumin. The physical health improved somewhat, and he exhibited periods of pronounced agitation with furor. The speech defect increased markedly as did inco-ordination and incoherence. Dementia became profound, a small wound at left external orbital process became infected, and extension via orbit to the cerebral meninges took place.

Pathological report: Purulent meningitis over left hemisphere, dura over right hemisphere adherent and there was a reddish gray fibinous mass 2mm. to 3mm. thick, evidently an old epidural clot organized, extending over the entire surface of the right hemisphere, brain cortex atrophied, chronic of mitral and tricuspid

valvulitis with areas of atheroma, atheroma of coronaries, a meckles diverticulum 3 inches long and $\frac{3}{4}$ -inch in diameter in the usual situation, moderate chronic interstitial nephritis with recent parenchymatous change, lobar pneumonia, perivascular increase connective tissue and fatty change in liver.

224. Male. Age 38. First admission. Psychosis: Dementia. Reported physical condition poor previous to and at time of admission, in 1896 was overcome with heat, in 1897 sustained great shock in railroad wreck, in April, 1907, had a right-sided stroke of paralysis with severe pains in head, jerking of limbs and eyes, and dysarthria.

Duration of psychosis: Not accurately known.

Cause of death: Chronic internal hydrocephalus with acute narrowing of aqueduct of Sylvius.

Clinical report: On admission patient was markedly demented, physical condition poor. Since admission steadily improved physically, has been irritable, somewhat resistant, at times cheerful, demented. On morning of July 20th was taken with convulsive seizure lasting five minutes, collapse and death followed within ten minutes.

Pathological report: Adhesive pericarditis with obliteration of pericardial cavity, cardiac hypertrophy, chronic mitral valvulitis, moderate arteriosclerosis, areas of atheroma in aorta, no tubercular nodules discovered in lungs, lateral ventricles enlarged, the left more than right, aqueduct of Sylvius narrowed, fourth ventricle not distended, no evidence of hemorrhage or softening, old or new, apparently some wasting particularly in the region of the left basal ganglia and capsule due to internal pressure.

225. Male. Age 61. First admission. Psychosis: Dementia. No report of previous condition.

Duration of psychosis: Unknown.

Cause of death: Intracerebral hemorrhage.

Clinical report: Physical condition previous to last illness apparently fair, arteriosclerosis well advanced, area of heart dullness increased laterally and downward, during last illness a systolic bruit was heard, quiet and industrious on the wards, demented. On day of his death was taken suddenly ill, following premonitory symptoms of confusion. Arose from dinner table shortly after 12, vomited, and fell unconscious. Head and eyes deviated to the left, pupils equal, pulse tension high, patellar tendon reflex present, no evidence of one-sided paralysis, coma progressively deepened and death ensued at 1:35 p. m.

Pathological report: Very large intracerebral hemorrhage on right side tearing into lateral ventricle. There was about 2 or 3 ounces of clot and blood occupying cavity made in the frontal and temporal lobes and all ventricles were filled with clot and blood. Consistency of brain rather soft, convolutions broad and somewhat flattened, marked general arteriosclerosis and atheroma, especially of cerebral vessels, cardiac hypertrophy, emphysema, arteriosclerotic kidney.

226. Female. Age 32. First admission. Psychosis: Epileptic mania. No report of condition previous to admission.
 Duration of psychosis: Unknown.
 Cause of death: Asphyxia during epileptic seizures.
 Clinical report: Physical condition has been fairly good, and she was quiet when not suffering from epileptic attacks.
 Pathological report: Intense cyanosis and congestion of face, lips, neck and upper part of thorax, marked edema and congestion of lungs, profuse frothy exudate on sectioning lungs, congestion of abdominal viscera, ovaries cystic, dura of brain and bones of cranium thickened.
227. Female. Age 75. First admission. Psychosis: Senile dementia. Reported mental deterioration developing insidiously for some time prior to admission.
 Duration of psychosis: Unknown.
 Cause of death: Pneumonia, myocarditis.
 Clinical report: Admitted October, 1906. When admitted physical condition was rather poor, and her mental condition dementia, she being almost oblivious to her surroundings. Since admission she has failed physically and mentally, losing all self-control, very restless. Incontinent of urine. Basal murmur loudest at systole. For several days previous to death patient failed rapidly, refused food and had to be catheterized, urine concentrated and albuminous. Cardiac dilatation, and death ensued.
 Pathological report: General atrophy of brain, cardiac hypertrophy, myocarditis and dilatation, hydropericardium, general arteriosclerosis well advanced, aorta sclerotic and atheromatous with calcified areas, bilateral hydrothorax, chronic pleural adhesions, numerous old tuberculous foci, broncho-pneumonia, hydroperitoneum, peritoneal adhesions, nutmeg liver, pyloric constriction, white infarct in spleen, cystic ovaries.
228. Female. Age 75. First admission. Psychosis: Chronic mania, secondary dementia. No report of condition previous to admission.
 Duration of psychosis:
 Cause of death: Pneumonia, nephritis, myocarditis.
 Clinical report: Patient has suffered three years from nephritis, weak heart action from time to time has been noted. September 20, taken suddenly with chills, temperature rose to 103.5, pulse strong and full. Cardiac embarrassment soon became apparent, rusty blood-streaked sputum, dullness posteriorly on the right side, unconsciousness for twenty-four hours before death, which occurred on September 26.
 Pathological report: General cerebral atrophy, convolutions somewhat flattened, cerebral vessels markedly sclerotic and atheromatous, general arteriosclerosis, atheromatous areas in aorta and coronaries, myocarditis, chronic mitral and tricuspid valvulitis, dilatation of ascending part of the arch, resolving pneumonia in right lung at base, many old tuberculous foci, small recent cavity, very marked irregular fibrosis of lungs, chronic nephritis.

Respectfully,

CHARLES C. MANGER, M. D.,

Pathologist.

The lecture course for the session of 1907-08 is as follows:

The Medical College of Indiana (the medical department of Purdue University) will present a course of lectures for 1907-1908, Professor E. G. Reyer, M. D., and Professor A. E. Sterne, M. D. (alternating), representing the college, their lectures designated by "B."

In connection therewith Charles C. Manger, M. D., Ph. G., the Pathologist of the Institution, will deliver a course in Neuro-Pathology, designated by "A."

1907.

September 17th, 2 p. m.—

A. Development of the Nervous System.

B. Classification of Insanity; Definitions.

Cases illustrating: Hallucinations, delusions, mental inco-ordination, exaltation, depression, apathy, the stigmata of degeneration, etc.

Professor Reyer.

September 24th, 2 p. m.—

A. Anatomy and Physiology of the Spinal Cord.

B. Manic-depressive Psychosis.

Cases illustrating: Simple, agitated, stuporous melancholia; hypochondriasis, etc.

Professor Sterne.

October 1st, 2 p. m.—

A. Anatomy of the Brain.

B. Manic-depressive Psychosis.

Cases illustrating: Simple, acute, subacute and chronic mania.

Professor Reyer.

October 8th, 2 p. m.—

A. Anatomy of the Brain, and Cerebral Localization.

B. Acute Confusional and Stuporous Types.

Cases illustrating same.

Professor Sterne.

October 15th, 2 p. m.—

A. Circulation in the Brain and Cord.

B. Insanity of the Recurring Types.

Cases illustrating: Periodical and circular forms.

Professor Reyer.

October 22, 2 p. m.—

A. Pathology of Spinal System Diseases:

1st, Tabes dorsalis.

2d, Lateral sclerosis.

3d, Combined sclerosis.

4th, Hereditary ataxia.

B. Paranoia, and Paranoiacs Generally.

Cases illustrating: Paranoia and pseudo-paranoia.

Professor Sterne.

October 29th, 2 p. m.—

- A. Pathology of Spinal System Diseases:
 - 5th, Acute anterior poliomyelitis.
 - 6th, Subacute and chronic poliomyelitis.
 - 7th, Amyotrophic lateral sclerosis.
 - 8th, Progressive muscular atrophies, and dystrophies.
 - B. Insanities Associated with the Neuroses and Psycho-neuroses.
- Cases illustrating: Epileptic, hysteric, neuraesthetic forms, etc.
- Professor Reyer.

November 5th, 2 p. m.—

- A. Pathology of Diffuse or General Spinal Diseases:
 - 1st, Myelitis.
 - 2d, Multiple sclerosis.
 - 3d, Siringomyelia.
 - 4th, Hypertrophic cervical pachymeningitis.
 - 5th, Syphilitic meningitis.
 - B. Dementia Paretica Progressiva.
- Cases illustrating same.
- Professor Sterne.

November 12th, 2 p. m.—

- A. Pathology of Diseases of the Brain.
 - 1st, Anaemia.
 - 2d, Hemorrhage.
 - 3d, Softening.
 - 4th, Syphilis.
 - B. Insanities Associated with Gross Lesions of the Brain.
- Cases illustrating: Cerebral hemorrhage, the sclerosis, tumors, injuries, etc.
- Professor Reyer.

November 19th, 2 p. m.—

- A. Pathology of:
 - 1st, Brain tumors.
 - 2d, Bulbar paralysis.
 - 3d, Neuritis and multiple neuritis.
 - B. Toxic Insanities.
- Cases illustrating: Alcohol and drug habits, post febrile cases, puerperal choreic, etc.
- Professor Sterne.

November 26th, 2 p. m.—

- A. Neuro-Pathological Demonstration—Selected.
 - B. Terminal Dementia.
- Professor Reyer.

December 3d, 2 p. m.—

- A. Neuro-Pathological Demonstration—Selected.
 - B. Psychiatry-Miscellaneous Subjects—Clinical.
- Professor Sterne.

December 10th, 2 p. m.—

- A. Neuro-Pathological Demonstration—Selected.
 - B. Psychiatry—Miscellaneous Subjects—Clinical.
- Professor Reyer.

December 17th, 2 p. m.—

- A. Neuro-Pathological Demonstration—Selected.
- B. Psychiatry—Miscellaneous Subjects—Clinical.

Professor Sterne.

The Indiana University School of Medicine will present the following course of lectures for 1908. Professors Hutchins and Professor Todd will represent the University, their lectures being designated by "B."

In connection therewith Charles C. Manger, M. D., Ph. G., the Pathologist of the Institution, will deliver a course in Neuro-Pathology, designated by "A."

January 10th, 2 p. m.—

- A. Development of the Nervous System.
- B. Manic-depressive Insanity. States of Mental Depression. Melancholia.
Presentation of simple, delusional, hypochondriacal, agitated and stuporous cases.

January 17th, 2 p. m.—

- A. Anatomy and Physiology of the Spinal Cord.
- B. Manic-depressive Insanity. States of Mental Exultation. Mania.
Presentation of simple, acute, and chronic cases.

January 24th, 2 p. m.—

- A. Anatomy of the Brain.
- B. Psychoses of Exhaustion.
Presentation of acute confusional and stuporous cases.

January 31st, 2 p. m.—

- A. Anatomy of the Brain and Cerebral Localization.
- B. Psychoses following Chemical Poisoning.
Presentation of alcohol, opium, cocaine, and other cases of rarer forms.

February 7th, 2 p. m.—

- A. Circulation in the Brain and Cord.
- B. Psychoses following Bacterial and Toxalbumic Poisoning.
Presentation of puerperal, acute deliria and febril deliria cases.

February 14th, 2 p. m.—

- A. Pathology of Spinal System Diseases :
1st, Tabes dorsalis.
2d, Lateral sclerosis.
3d, Combined sclerosis.
4th, Hereditary ataxia.
- B. Psychoses following Antogenic Poisoning.
Presentation of cases with uraemia, arthritis, cholaemia, myxoedema, and exophthalmic goitre.

February 21st, 2 p. m.—

- A. Pathology of Spinal System Diseases:
 - 5th, Acute anterior poliomyelitis.
 - 6th, Subacute and chronic poliomyelitis.
 - 7th, Amyotrophic lateral sclerosis.
 - 8th, Progressive muscular atrophies and dystrophies.

B. Paralytic Dementia.

Presentation of cases with various forms.

February 28th, 2 p. m.—

- A. Pathology of Diffuse or General Spinal Diseases:

1st, Myelitis.

2d, Multiple sclerosis.

3d, Syringomyelia.

4th, Hypertrophic cervical pachymeningitis.

5th, Syphilitic meningitis.

- B. Psychoses of the Psychical Degenerate.

Presentation of paranoia and other cases.

March 6th, 2 p. m.—

- A. Pathology of Diseases of the Brain.

1st, Anemia.

2d, Hemorrhage.

3d, Softening.

4th, Syphilis.

- B. Psychoses due to Cerebral Lesions.

Presentations of syphilitic, demented, senile, atrophic, traumatic and other organic cases.

March 13th, 2 p. m.—

- A. Pathology of:

1st, Brain tumors.

2d, Bulbar paralysis.

3d, Neuritis and multiple neuroses.

- B. Psychoses following Constitutional Neuroses.

Presentation of epileptic, neuraesthetic and hysterical cases.

March 20th, 2 p. m.—

- A. Neuro-pathological Demonstration. Selected.

- B. Psychoses due to Arrested Psychical Development.

Presentation of various illustrated cases.

March 27th, 2 p. m.—

- A. Neuro-pathological Demonstration. Selected.

Treatment and Care of the Insane.

Presentation of methods, feeding and humane restraints.

A COURSE IN MENTAL PATHOLOGY.

Special clinics are provided for those who desire to take instruction in Mental Pathology. This course will be in charge of Professor E. H. Lindley of Indiana University.*

These clinics are designated to demonstrate those phenomena of insanity which are especially instructive to students of psychology.

The course this year will include the following:

1. The form of insanity :
Melancholia, mania, dementia, idiocy, imbecility, dementia præcox, impulsive and compulsive insanity; paranoia, paralytic dementia, and senile dementia.
2. Psycho-pathology :
 - a. Disturbances of perception (illusions, pseudo-hallucinations and hallucinations).
 - b. Disturbances of mental elaboration (amnesia, paramnesia, loss of orientation, malformation of ideas and concepts, disturbances of judgment and reasoning, disturbances of self-consciousness, retardation and flight of ideas, etc.).
 - c. Disturbances of the emotions (anhedonia, delusions, sporadic and systematized).
 - d. Disturbances of volition and action (impulsive and compulsive ideas, echo-praxis, negativism, stereotypism, abulia, etc.).

Cases illustrative of the above will be presented to the classes.

Members of the hospital staff will alternate in arranging cases for all the clinical lectures.

The following general rules will govern the course:

The lectures will commence September 17, 1907, at 2 p. m., and each Tuesday thereafter.

All students must be in their seats promptly at the hour scheduled.

Questions will be furnished by the Pathological Department in the final examinations.

Due notice of autopsies will be given the class by telephone to college.

Certificates of attendance will be issued by the college for these lectures.

Students must maintain quiet while in the grounds or buildings.

Smoking in the department is prohibited.

These lectures are free to practitioners and students of medicine. Others will not be admitted except upon special permission by the Superintendent or Lecturer.

The books mentioned below were added to the library of this department during the past year.

Mental Defectives—Bahr.
 Diseases of the Nervous System—Gowers.
 Medical Diagnosis—Greene.
 Surgery—Bernays.
 The Thyroid—Richardson.
 Psychological Medicine—Craig.
 Organization of Hospitals—Ochsner.
 Human Mechanism—Hough.
 The Eye and Nervous System—Posey and Spiller.
 Psychology and Mental Disease—Burr.
 Pathology—Stengel.
 Abdominal Surgery—Kelly-Noble.
 Surgical Diagnosis—Eisendrath.
 Human Anatomy—Sobatta.

OFFICERS AND EMPLOYES.

It is again a pleasure to certify to the faithfulness of the officers and employes of the hospital and to publicly express my appreciation of the manner in which they have discharged their several duties.

To the Board of Trustees I acknowledge my indebtedness for many words of encouragement and advice in meeting the many perplexing problems of institutional management.

I trust that the spirit of harmony will continue to prevail, and that I shall merit your approval in all that concerns the welfare of the Institution and its unfortunate charges.

Very respectfully,

GEO. F. EDENHARTER, M. D.,

Superintendent.

September 30, 1907.

MOVEMENT OF POPULATION FOR THE FISCAL YEAR 1906-1907.

RESULTS.	Men.	Women.	Total.
Number of patients at beginning of the year.....	877	1,099	1,976
Admitted during the year.....	222	160	382
Whole number under treatment.....	1,099	1,259	2,358
Discharged as recovered.....	61	52	113
Discharged as improved.....	53	26	79
Discharged as unimproved.....	13	1	14
Died.....	63	54	117
Remaining at the close of the year.....	909	1,126	2,035
Per cent. of recovered of whole number under treatment.....	5.55	4.13	4.707
Per cent. recovered to number admitted.....	27.477	31.875	29.319
Per cent. died of whole number treated.....	5.731	4.209	4.962
Daily average number actually present.....	835.088	1,062.907	1,837.995

ADMISSIONS, DISCHARGES AND DEATHS, FROM BEGINNING OF THE HOSPITAL, 1848.

RESULTS.	Men.	Women.	Total.
Admitted.....	13,645	11,618	25,263
Discharged as recovered.....	5,544	4,778	10,322
Discharged as improved.....	2,148	2,134	4,282
Discharged as unimproved.....	2,451	1,520	3,971
Discharged as not insane.....	37	29	66
Discharged as feeble-minded.....		6	6
Died.....	2,543	2,010	4,553
Total number discharged and died.....	12,723	10,477	23,200

MOVEMENT OF POPULATION BY MONTHS FOR THE YEAR.

MONTH.	ADMITTED.		DISCHARGED.						DIED.	
			Recovered.		Improved.		Unimproved.			
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
November, 1906.....	13	12	3		4		1		5	6
December, 1906.....	26	11	9	15	10	9	3		9	6
January, 1907.....	17	17	8		2	1	2		4	7
February, 1907.....	11	10	8	1	4	3	1		6	2
March, 1907.....	26	20	6	6	2	4	2		4	5
April, 1907.....	15	13	5	5	7		1		5	3
May, 1907.....	21	19	2		7		1		7	6
June, 1907.....	29	11	6	10	8	3			5	7
July, 1907.....	24	19	10	12	4	2	1		7	7
August, 1907.....	24	14	4	3	5	3	1	1	7	1
September, 1907.....	16	14				1			4	4
Total fiscal year, 1906-1907...	222	160	61	52	53	26	13	1	63	54

ADMISSIONS, DISCHARGES AND DEATHS FROM BEGINNING OF THE HOSPITAL, 1848.

FISCAL YEAR.	ADMITTED.			Recovered.			Improved.			Unimproved.			Not Insane.			Idiotic.			DIED.			REMAINING AT END OF FISCAL YEAR.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Up to Oct. 31—																								
1883.....	6,814	5,361	11,375	2,960	2,555	5,515	541	783	1,324	1,112	890	2,002	...	...	...	...	...	...	786	622	1,408	618	496	1,114
1884.....	481	585	906	190	139	329	51	87	88	41	44	85	...	...	...	...	...	...	81	31	112	643	750	1,393
1885.....	453	321	774	234	147	381	26	71	97	78	12	90	7	7	14	...	...	...	70	57	127	677	777	1,454
1886.....	416	371	787	163	148	311	68	49	97	117	14	131	6	4	10	...	...	...	62	41	103	697	892	1,589
1887.....	391	386	697	208	171	379	65	106	171	108	54	162	6	4	10	...	...	...	64	33	97	649	864	1,513
1888.....	353	325	678	141	170	311	67	45	112	82	35	117	4	3	7	...	...	...	55	60	115	655	871	1,526
1889.....	337	237	574	151	91	242	37	70	107	70	28	98	8	3	11	...	...	...	42	43	85	684	873	1,557
1890.....	380	284	664	177	63	240	110	108	218	130	80	210	...	...	...	...	...	...	35	35	70	712	871	1,583
1891.....	302	259	561	33	89	122	61	40	101	116	153	269	1	...	...	...	...	...	55	55	110	748	793	1,541
1892.....	200	199	399	47	80	127	62	45	127	55	28	83	...	...	...	...	...	...	50	50	100	714	789	1,503
1893.....	198	202	400	107	67	174	83	47	85	23	4	27	...	...	...	...	...	...	51	54	105	693	819	1,512
1894.....	246	206	452	74	81	155	76	39	115	25	31	56	...	...	...	...	...	...	70	70	140	694	804	1,498
1895.....	269	210	479	59	71	130	73	39	112	45	11	56	...	...	...	...	...	...	81	51	132	705	838	1,543
1896.....	251	232	483	80	70	150	68	51	119	19	16	35	2	2	3	...	...	...	78	56	134	711	875	1,586
1897.....	290	232	522	79	102	181	82	38	120	58	5	63	1	2	3	...	...	...	71	57	128	710	903	1,613
1898.....	304	264	568	74	95	169	55	55	110	73	10	83	...	...	...	...	...	...	73	65	138	739	941	1,680
1899.....	342	282	624	103	68	171	38	33	71	105	12	117	...	...	...	...	...	...	79	82	161	756	1,028	1,784
1900.....	385	265	570	97	96	193	77	155	237	37	9	46	1	...	...	...	...	...	84	59	143	764	1,052	1,816
1901.....	313	269	582	99	81	180	73	74	147	34	13	47	1	1	1	...	...	...	98	80	178	772	1,073	1,845
1902.....	388	228	566	113	77	190	89	53	142	19	15	34	...	...	...	...	...	...	89	52	141	800	1,104	1,904
1903.....	349	240	589	102	85	187	87	72	159	17	15	32	...	...	...	...	...	...	84	85	169	859	1,087	1,946
1904.....	387	250	637	119	52	171	98	71	169	39	24	63	1	...	...	...	...	...	125	72	197	864	1,118	1,982
1905.....	322	231	553	74	49	123	80	55	135	10	3	13	...	...	...	...	...	...	110	84	194	912	1,158	2,070
1906.....	262	179	441	99	113	212	72	50	122	25	13	38	1	...	...	...	...	...	100	62	162	877	1,099	1,976
*Sep. 30—	222	160	382	61	52	113	53	26	79	13	1	14	...	...	...	...	...	...	63	54	117	909	1,126	2,035
1907.....	13,645	11,618	25,263	5,544	4,778	10,322	2,148	2,194	4,289	2,451	1,520	3,971	37	29	66	...	...	...	2,543	2,010	4,553	909	1,126	2,035
Total.....																								

NOTE.—Subtracting the number of discharged and died from the number admitted a plus difference of 28 patients, 13 male and 15 female, will be revealed, compared with the number present at end of fiscal year. The explanation therefor was given in our 1900 annual report.

*The last year (1907), embraces but eleven months; by act of the General Assembly the fiscal year was changed to begin on October 1st hereafter instead of on November 1.

AGE AND MARITAL CONDITION OF THOSE ADMITTED, DISCHARGED AND DIED, DURING THE YEAR.

AGE.	ADMITTED.				DISCHARGED								DIED.	
	Recovered.				Otherwise.								Single.	
	Single.				Married.				Single.				Married.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Under 15 years.....	8	5	1	1	2	1	2	1	2	2	1	3	1	3
From 15 to 20 years.....	13	7	7	3	6	3	6	3	8	8	2	3	3	3
20 to 25 years.....	15	13	14	2	4	1	4	1	8	2	2	1	5	1
25 to 30 years.....	27	11	32	1	14	11	14	11	6	6	6	6	5	6
30 to 40 years.....	13	5	42	1	15	12	15	1	5	5	8	1	6	9
40 to 50 years.....	6	2	33	2	4	4	4	1	2	4	7	3	13	10
50 to 60 years.....	1	1	15	4	4	4	3	1	1	4	4	2	6	6
60 to 70 years.....			2										3	3
70 to 80 years.....													6	2
Over 80 years.....														
Age or marital condition unknown.....	1	2		1					1		3			
Total.....	84	46	138	114	8	35	44	7	31	1	35	20	30	37

DURATION OF TREATMENT OF THOSE DISCHARGED AND DIED
DURING THE YEAR.

TIME.	DISCHARGED.				DIED.	
	Recovered.		Otherwise.			
	Men.	Women.	Men.	Women.	Men.	Women.
Under one month.			2		11	3
From one to two months.	2				3	1
From two to three months.	8		3	2	4	2
From three to six months.	23		10	1	2	2
From six to nine months.	13	2	6	1	4	2
From nine to twelve months.	6	8	6		1	
From one to two years.	7	25	14	8	8	7
From two to three years.	1	13	9	4	15	9
From three to four years.	1	3	6	5	4	4
From four to five years.		1	3	1	1	2
Over five years.			7	5	10	2
Total.	61	52	64	27	63	54

ADMISSIONS, DISCHARGES AND DEATHS, BY COUNTIES DURING
THE YEAR.

COUNTY.	ADMITTED.		DISCHARGED.		DIED.	
	Men.	Women.	Men.	Women.	Men.	Women.
Allen.....						1
Bartholomew.....	7	4	3		4	
Benton.....	5		1	1	1	
Boone.....	2	4				1
Brown.....	3	3			1	
Carroll.....	1	3	2	2		1
Clark.....	3	2	3		1	2
Clay.....	3	5	4	3	5	1
Clinton.....	5	8	3	2	4	1
Dearborn.....	5	7	3	3		1
Floyd.....	4	3	2	5	2	
Fountain.....	2	4	4		2	
Hamilton.....	7	3	2	1		1
Hancock.....	5	1	2		1	
Hendricks.....	4	4	3	1	3	1
Howard.....	10	3	1		5	1
Jackson.....	4	6	1	2	3	1
Jefferson.....	3	4	3	6	1	1
Jennings.....	5		2			1
Johnson.....	4	2	5			1
Lawrence.....	4	1	2	3	1	
Marion.....	57	37	38	24	13	15
Monroe.....	5		3		1	1
Montgomery.....	8	6	1	1	2	3
Morgan.....	3	3	2	1		2
Ohio.....		1	1	2	1	1
Owen.....	1			2	1	1
Parke.....	6	1	6			
Putnam.....	3	3		3		1
Ripley.....	1			2	2	1
Scott.....	1		1	1		
Shelby.....	9	5	4	2	2	3
Spencer.....						1
Switzerland.....	2	4				1
Tippecanoe.....	2	8	5		1	2
Tipton.....	5	1	2	2	1	
Vermillion.....	4	4	5	4		2
Vigo.....	23	13	10	3	5	5
Warren.....	3	4	1	1		
Washington.....	3	3	2		1	
Total.....	222	160	127	79	63	54

FORM OF INSANITY OF THOSE ADMITTED DURING THE YEAR.

FORM.	Men.	Women.	FORM.	Men.	Women.
Alcoholism.....	1		Mania, epileptic.....	11	3
Alcoholism, chronic.....	10		Mania, periodic.....	3	
Dementia, acute.....		1	Mania, puerperal.....		4
Dementia, organic.....	8		Mania, recurrent.....	15	16
Dementia, præcox.....		1	Mania, sub-acute.....	5	3
Dementia, primary.....	16		Melancholia.....	3	11
Dementia, secondary.....	2		Melancholia, acute.....	36	31
Dementia, senile.....	8	3	Melancholia, agitata.....	1	13
Dementia, terminal.....	1		Melancholia, chronic.....	9	6
Epileptic imbecile.....		1	Melancholia, hypochondriacal.....		1
Hypomania.....		3	Melancholia, recurrent.....	11	8
Insanity, alcoholic.....	4		Melancholia, stuporous.....		1
Insanity, choreic.....		1	Morphomania.....	3	3
Insanity, climacteric.....		7	Narcomania.....	1	
Insanity, confusional.....	1	8	Neurasthenia.....		1
Insanity, epileptic.....	1	2	Paralysis, general.....	2	
Insanity, hysterical.....		4	Paranoia.....	4	7
Insanity, post-febrile.....		1	Psychosis, post-febrile.....		1
Mania, acute.....	43	14	Paresis.....	15	
Mania, chronic.....	7	4	Unclassified.....	1	
Mania, depressive.....		1			
			Total.....	222	160

CAUSE OF INSANITY OF THOSE ADMITTED DURING THE YEAR.

CAUSE.	Men.	Women.	CAUSE.	Men.	Women.
Accident.....	1		Measles.....		1
Alcoholism.....	1		Menopause.....		2
Apoplexy.....	1		Morphine.....	4	3
Cigarettes.....		1	Nephritis.....	1	
Climacteric.....		7	Old age.....	8	4
Death of mother.....	2		Operation, surgical.....	1	
Disease of bladder.....	1		Opium smoking.....		1
Disease of kidneys.....	1		Overheated.....	3	1
Disease of lungs.....	1		Overstudy.....		1
Disease of spine.....	1		Overwork.....	5	
Epilepsy.....	11	5	Pregnancy.....		2
Excitement, religious.....	3		Puerperium.....		1
Hemiplegia.....	1		Shock, electric.....	1	
Hereditary.....	19	13	Sunstroke.....	1	
Ill health.....	11	2	Syphilis.....	4	
Injury.....	10		Trouble, domestic.....	3	
Intemperance.....	14	3	Trouble, financial.....	1	
Lagrippe.....	1	1	Trouble, labor.....	1	
Masturbation.....	6		Unknown.....	106	120

NUMBER OF ATTACKS OF THOSE ADMITTED DURING THE YEAR.

ATTACKS AND DURATION.	Men.	Women.
First attack, under one month duration.....	56	26
First attack, from 1 to 3 months' duration.....	40	19
First attack, from 3 to 6 months' duration.....	22	16
First attack, from 6 to 9 months' duration.....	14	14
First attack, from 9 to 12 months' duration.....	2	2
First attack, from 1 to 2 years' duration.....	20	10
First attack, from 2 to 3 years' duration.....	14	4
First attack, over 3 years' duration.....	11	16
First attack, of unknown duration.....	2	11
Second attack.....	30	30
Third attack.....	7	9
Fourth attack.....	2	2
Fifth attack.....	1	
Over five attacks.....	1	1
Total.....	222	160
Of the above were re-committed.....	41	39

CAUSE OF DEATH.

CAUSE.	Men.	Women.	CAUSE.	Men.	Women.
Abscess, deep cervical.....	1		Heart, valvular disease.....	2	
Apoplexy.....	2		Intestinal obstruction.....	1	
Asphyxia.....	1		Meningitis.....	1	1
Asphyxia, due to epilepsy.....		1	Meningitis, cerebral.....		1
Burns.....	1		Meningitis, tubercular.....	1	
Carcinoma of stomach.....		1	Myocarditis.....	1	4
Cerebral hemorrhage.....	2	3	Myocarditis, chronic.....		3
Cerebral thrombus.....		1	Nephritis.....		1
Cerebral softening.....	1		Nephritis, chronic.....		3
Concussion of brain.....	1		Oedema of lungs.....	1	
Convulsions.....		1	Paresis.....	4	2
Convulsions, uræmic.....		1	Pneumonia.....	2	
Convulsions, parætic.....	3		Pneumonia, hypostatic.....	4	3
Convulsions, epileptic.....	1	1	Pneumonia, lobar.....	1	5
Cystitis, chronic.....		1	Sclerosis, arterial.....	1	
Diabetes.....	1		Sepsis.....		1
Diabetes, mellitus.....	1		Suffocation.....	1	1
Diarrhœa, chronic.....		1	Suicide by hanging.....	1	1
Dysentery, acute.....	1		Suicide by strangulation.....	1	
Enteritis, acute.....	1		Tabes dorsalis.....	1	
Enterocolitis.....		2	Toxæmia.....		1
Enterocolitis, chronic.....		1	Tuberculosis.....	2	3
Endocarditis, chronic.....	1		Tuberculosis, intestinal.....	1	
Epilepsy.....	1	1	Tuberculosis, pulmonary.....	9	6
Epilepticus, status.....	6	1	Uræmia.....	1	
Exhaustion.....	1				
Exhaustion, maniacal.....	2	1	Total.....	63	54

OCCUPATION OF THOSE ADMITTED DURING THE YEAR.

OCCUPATION.	Men.	Women.	OCCUPATION.	Men.	Women.
Agent.....	1		Janitor.....	1	
Baker.....	3		Laborer.....	60	
Barber.....	2		Laundress.....		1
Bartender.....	1		Lawyer.....	2	
Billcutter.....	1		Machinist.....	3	
Bookkeeper.....	1		Machine fitter.....	1	
Bootblack.....	1		Mason.....	1	
Butcher.....	2		Merchant.....	1	
Butler.....	1		Miner.....	6	
Canvasser.....	1		Molder.....	2	
Carpenter.....	7		Musican.....	1	
Car repairer.....	1		Music teacher.....		1
Carriage trimmer.....	1		Nurse.....		1
Clerk.....	5	3	Operator of mine.....	1	
Cook.....	1		Painter.....	2	
Domestic.....		15	Physician.....	1	
Dressmaker.....		1	Printer.....	3	
Druggist.....	1		Quarryman.....	1	
Engineer.....	3		Railroader.....	1	
Express messenger.....	1		Shoemaker.....	1	
Feather renovator.....	1		Stenographer.....	1	1
Farmer.....	67		Tailor.....	4	
Fireman.....	1		Teacher.....	1	2
Florist.....	1		Teamster.....	2	
Furniture finisher.....	1		Telegrapher.....	2	
Guard.....	1		Upholsterer.....	1	
Harnessmaker.....	1		Unknown.....	4	5
Horseman.....	1		None.....	11	15
Housekeeper.....		21			
Housewife.....		81	Total.....	222	160
Housework.....		13			

NATIVITY OF THOSE ADMITTED DURING THE YEAR.

STATE.	Men.	Women.	COUNTRY.	Men.	Women.
Indiana.....	147	115	Austria.....	1	1
Arkansas.....		1	Canada.....		1
Georgia.....		1	England.....	1	1
Illinois.....	10	2	Finland.....	1	
Kansas.....	3	1	Germany.....	11	9
Kentucky.....	11	4	Holland.....	1	
Maryland.....		1	Ireland.....	5	2
Michigan.....	1		Italy.....	1	1
New York.....	2	2	Russia.....		1
North Carolina.....		2	Sweden.....	2	1
Ohio.....	12	6	Switzerland.....		2
Pennsylvania.....	4	1	Unknown.....	4	4
Tennessee.....	4				
Virginia.....	2				
Wisconsin.....		2	Total.....	222	160

CIVIL CONDITION OF THOSE ADMITTED, DISCHARGED AND DIED DURING THE YEAR.

CONDITION.	ADMITTED.		DISCHARGED.		DIED.	
	Men.	Women.	Men.	Women.	Men.	Women.
Single.....	84	46	57	15	30	17
Married.....	121	95	63	50	29	27
Widowed.....	15	14	7	13	3	10
Divorced.....	2	5		1	1	
Total.....	222	160	127	79	63	54

EDUCATION OF THOSE ADMITTED DURING THE YEAR.

EDUCATION.	Men.	Women.
Collegiate.....	19	10
Common school.....	182	139
Read.....	6	1
None.....	14	6
Unknown.....	1	4
Total.....	222	160

COLOR OF THOSE ADMITTED DURING THE YEAR.

COLOR.	Men.	Women.
White.....	209	156
Colored.....	13	4
Total.....	222	160

STATISTICS.

Prepared in Accordance with a Resolution of the National Conference of
Charities and Corrections, Adopted May 15, 1906.

POPULATION.

	Men.	Women.	Total.
Number of inmates present at beginning of fiscal year.....	828	1,008	1,836
Number of patients enrolled at beginning of fiscal year.....	877	1,099	1,976
Number admitted during the year.....	222	160	382
Number discharged or died during the year.....	190	133	323
Number present at end of fiscal year.....	847	1,012	1,859
Number enrolled at end of fiscal year.....	909	1,126	2,035
Daily average attendance during the year.....			168.624
Average number of officers and employes during the year.....			341.560

EXPENDITURES.

Current Expenses—		
1 Salaries and wages.....	\$105,077 98	
2 Clothing.....	10,935 78	
3 Subsistence.....	105,252 77	
*4 Ordinary repairs.....	25,785 80	
5 Office, domestic and outdoor expenses.....	65,840 68	
Total.....		\$312,893 01
Extraordinary Expenses—		
1 New buildings, land, etc.....		
2 Permanent improvements to existing buildings.....		
Total.....		
Grand total.....		\$312,893 01

*Includes \$4,556.86 for labor.

Executive Head: Superintendent.

EXHIBIT No. 1.

STATEMENT OF FUNDS AND EXPENDITURES OF SAME OF CENTRAL INDIANA HOSPITAL FOR INSANE DURING THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

Maintenance Fund	\$300,000 00	
Maintenance Fund, excess patients.....	6,903 70	
Expended November, 1906		\$30,623 37
Expended December, 1906		29,126 18
Expended January, 1907		24,172 97
Expended February, 1907		24,943 58
Expended March, 1907		26,093 00
Expended April, 1907		25,630 07
Expended May, 1907		25,432 51
Expended June, 1907		25,269 84
Expended July, 1907		24,101 90
Expended August, 1907		20,679 02
Expended September, 1907		22,252 64
One-twelfth annual appropriation unexpended		25,000 00
Unexpended balance		3,578 62
Total	\$306,903 70	\$306,903 70
Repair Fund	\$25,000 00	
Expended November, 1906		\$4,287 69
Expended December, 1906		3,125 60
Expended January, 1907		1,460 59
Expended February, 1907		1,598 04
Expended March, 1907		801 18
Expended April, 1907		1,061 74
Expended May, 1907		922 66
Expended June, 1907		1,634 92
Expended July, 1907		4,684 45
Expended August, 1907		748 24
Expended September, 1907		1,449 24
One-twelfth annual appropriation unexpended		2,083 33
Unexpended balance		1,142 32
Total	\$25,000 00	\$25,000 00

EXHIBIT No. 1—Continued.

Clothing Fund	\$14,000 00	
Expended November, 1906		\$1,483 61
Expended December, 1906		856 25
Expended January, 1907		2,202 68
Expended February, 1907		2,358 59
Expended March, 1907		1,025 48
Expended April, 1907		945 43
Expended May, 1907		864 34
Expended June, 1907		677 13
Expended July, 1907		200 84
Expended August, 1907		183 25
Expended September, 1907		1,996 03
One-twelfth annual appropriation unexpended.		1,166 67
Unexpended balance		39 75
<hr/>		
Total	\$14,000 00	\$14,000 00

EXHIBIT No. 2.

VOUCHERS PAID FROM MAINTENANCE FUND FOR EXPENDITURES DURING THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

No.	Payable To.	What For.	Amount.
1.	George F. Edenharter, Supt.....	Contingent fund	\$2,000 00
2.	The Indianapolis News	Advertising	1 56
3.	Kipp Bros. Co.	Bolt ribbon	1 50
4.	Charles D. Pearson & Co.....	Queensware	83 10
5.	Capital Paper Co.....	Toilet paper	10 00
6.	Wm. H. Armstrong & Co.....	One truss	3 75
7.	C. H. McDowell	Services as chaplain	20 00
8.	Indianapolis Water Co.....	Water	430 99
9.	Wm. B. Burford	Stationery	121 55
10.	John B. Bright & Son.....	Tea	319 19
11.	James McCrea & Co.....	Valve discs	36 45
12.	Crescent Oil Co.....	Oils	56 15
13.	George T. Evans & Son.....	60 barrels flour	229 80
14.	Vawter Hay and Grain Co.....	Meal and feed	89 02
15.	The Acme Milling Co.....	140 barrels flour	453 60
16.	The John Van Range Co.	Castings for range	2 10
17.	H. J. Heinz Co.....	4 barrels vinegar	33 75
18.	The Geiger-Tinney Co.....	Coffee	528 60
19.	Charles G. Grah	Barber supplies	4 10
20.	Swift & Company	Hams, lard	1,168 56
21.	Hollweg & Reese	Queensware	6 41
22.	Syerup & Vondersaar	Bushel peaches	2 50
23.	Frank G. Kamps, Jr.....	Oysters	527 35
24.	M. C. Hunt	Chip soap and sal soda.....	441 55
25.	The E. C. Dolmetsch Co.....	Spectacles, etc.....	24 63
26.	The A. Burdsal Co.....	Gasoline	2 55
27.	Kirkhoff Bros. & Co.....	One deep well pump, etc.....	787 80

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
28.	Havens & Geddes Co.....	Quilts, etc.....	\$224 91
29.	Vonnegut Hardware Co.....	Hardware	79 60
30.	Singer Sewing Machine Co.....	Machine needles, etc.....	4 00
31.	The Albert Gall Co.....	Labor performed, etc.....	15 40
32.	Charles E. Price	Milk	630 50
33.	National Biscuit Co.....	Crackers	250 33
34.	Daniel Stewart Co.....	Drugs	102 04
35.	John W. Neumann & Co.....	Potatoes, etc.....	864 68
36.	J. C. Perry & Co.....	Groceries, etc.....	1,408 07
37.	Indianapolis Abattoir Co.....	Beef, etc.....	2,153 07
38.	Techtentin & Freiberg	Chamois skins, etc.....	6 75
39.	American District Telegraph Co.....	Messenger service	55
40.	M. O'Connor & Company.....	Canned goods	515 00
41.	Armour & Company	Oleomargarine	690 00
42.	Western Union Telegraph Co.....	Telegrams	2 11
43.	The Stirling Con. Boiler Co.....	Hose	15 00
44.	The Indianapolis Gas Co.....	Gas	40 92
45.	George Hitz & Co.....	Produce, etc.....	285 25
46.	Francke Hardware Co.....	Hardware	77 92
47.	J. R. Budd Company	Eggs, poultry	912 23
48.	Kingan & Co., Ltd.....	Sausages	176 50
49.	Tutewiler & Son.....	Undertaking	14 00
50.	Star Publishing Co.....	Advertising	2 00
51.	Lion Compressed Yeast Co.....	Yeast	20 25
52.	George F. Edenharter, Supt.....	Expense, bills, etc.....	870 28
53.	George F. Edenharter, Supt.....	Main pay-roll, November, 1906..	8,225 42
54.	A. B. Meyer & Co.....	Coal, lime, lath, etc.....	5,631 03
55.	L. A. Greiner & Sons.....	Veterinary services	19 00
56.	Wulschner-Stewart Music Co.....	Sheet music	9 00
57.	The A. Burdsal Co.....	Gasoline	85
58.	German-American Trust Co.....	Insurance	100 00
59.	Armour & Company	Oleomargarine, etc.....	1,153 87
60.	Capital Flour and Grain Co.....	Corn meal	26 00
61.	The J. H. Day Company	Machinery for bakery	718 00
62.	Louis E. Haag	Vaccine	6 96
63.	The Indianapolis Gas Co.....	Gas	39 03
64.	A. Booth & Co.....	Oysters	416 50
65.	Indianapolis Poultry Co.....	Eggs, turkeys	881 58
66.	Ind. Industrial Home for Blind Men.	Brooms	124 00
67.	Standard Oil Co.....	Oils	22 98
68.	Baeder, Adamson & Co.....	Bale hair in rope	420 26
69.	George D. Hardin.....	Hay	105 26
70.	George T. Evans & Son.....	Flour	684 90
71.	The Indianapolis News	Advertising	3 30
72.	The Albert Gall Co.....	Carpet	96 94
73.	Nelson, Morris & Co.....	Beef, etc.....	2,162 73
74.	Hibben, Hollweg & Co.....	Dry goods, etc.....	616 49
75.	National Biscuit Co.....	68 barrels crackers	183 62
76.	M. C. Hunt	Chip soap	324 82
77.	Swift & Company.....	Lard	211 87
78.	Lion Compressed Yeast Co.....	Yeast	19 25
79.	Daniel Stewart Co.....	Vaseline	6 25
80.	The J. F. Darmody Company	Xmas candles	285 50
81.	J. C. Perry & Co.....	Groceries, etc.....	1,033 24
82.	John W. Neumann & Co.....	10 barrels cranberries	74 00
83.	Syerup & Vandersaar	Sweet potatoes	214 03
84.	Singer Sewing Machine Co.....	Machine fixtures	2 00
85.	Charles D. Pearson & Co.....	Queensware	99 82
86.	Indianapolis Water Co.....	Water	423 91

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
87.	Havens & Geddes Co.....	Ticking, etc.....	\$81 98
88.	The Geiger-Tinney Co.....	Coffee	655 06
89.	Frank E. Jones	Feed	45 00
90.	H. J. Heinz Company	Vinegar	42 36
91.	Kipp Bros. Co.....	Xmas goods	148 55
92.	Wm. H. Armstrong & Co.....	Hospital bed screens, etc.....	312 30
93.	Charles E. Price	Milk	670 00
94.	George Hitz & Co.....	Fruit, etc.....	642 22
95.	J. R. Budd Company	Poultry	60 53
96.	Kingan & Co., Ltd.....	1403 pounds sausages	140 30
97.	The "Sanitas" Co., Ltd.....	Soap	172 00
98.	Wm. B. Burford	Stationery	52 93
99.	Tutewiler & Son.....	Undertaking	7 00
100.	J. E. Bell	Legal services	25 00
101.	M. O'Connor & Company	Canned goods and sundries	816 82
102.	A. Keifer Drug Co.....	Drugs	103 34
103.	George F. Edenharter, Supt.....	Expense bills, labor, etc.....	1,084 22
104.	George F. Edenharter, Supt.....	Main pay-roll, December, 1906..	8,408 72
105.	Central Union Telegraph Co.....	Telephone rentals and tolls....	64 62
106.	The American Laundry Mach. Co...	Duck, felt, etc.....	95 80
107.	Kipp-Link Phonograph Co.....	Mending musical instrument ..	7 75
108.	A. B. Meyer & Co.....	Fuel, lime, etc.....	4,984 06
109.	Frank G. Kamps, Sr.....	Fish	1 95
110.	Bausch & Lomb Optical Co.....	Gallon xylol	1 87
111.	Hollweg & Reese	Queensware	7 34
112.	L. A. Greiner & Son.....	Veterinary services	2 50
113.	C. H. McDowell	Services as chaplain	25 00
114.	H. W. Johns-Manville Co.....	Fire extinguishers	100 00
115.	Louis E. Haag	Vaccine	6 96
116.	The Indianapolis News.....	Advertising	1 71
117.	Blanton Milling Co.....	Corn meal	25 00
118.	William Suckow	140 barrels flour	448 00
119.	Standard Oil Company	4 barrels oil	45 44
120.	Crescent Oil Co.....	1 barrel oil	10 70
121.	George T. Evans & Son.....	Flour	229 31
122.	The Indianapolis Gas Co.....	Gas	39 75
123.	The A. Kiefer Drug Co.....	Medical supplies	12 38
124.	Eli Marvin	Services as trustee	88 30
125.	George B. Lockwood	Services as trustee	86 25
126.	D. H. Davis	Services as trustee	100 00
127.	M. C. Hunt	Chip soap, sal soda	516 42
128.	Charles G. Grah	Barber supplies	11 25
129.	Charles D. Pearson & Co.....	Queensware	87 25
130.	C. H. McDowell	Services as chaplain	20 00
131.	Indianapolis Water Co.....	Water rent	368 89
132.	Indianapolis Telephone Co.....	Telephone rentals and tolls	21 25
133.	Capital Paper Co.....	Toilet paper	10 50
134.	Pioneer Brass Works	Nozzles	8 40
135.	The John Van Range Co.....	Stove fixtures	4 26
136.	The J. H. Day Company	Bakery machinery	135 00
137.	Indianapolis Belting & Supply Co...	Leak-No Compound	9 06
138.	H. J. Heinz Company	Vinegar	33 21
139.	Hatfield Electric Co.....	Shades, holders, etc.....	1 98
140.	Royse Electric Co.....	Telephone receivers	7 50
141.	The Indianapolis Star	Advertising	1 50
142.	George Hitz & Co.....	Apples, lemons, etc.....	25 50
143.	Vonnegut Hardware Co.....	Hardware, etc.....	134 21
144.	J. C. Perry & Co.....	Peaches, tea, etc.....	753 23
145.	James L. Keach.....	Potatoes	389 00

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
146.	Armour & Company	Oleomargarine	\$690 00
147.	Tutewiller & Son	Undertaking	21 00
148.	The A. Burdsal Company	Gasoline	2 55
149.	Simon P. Neidigh	Car fares	11 00
150.	Hibben, Hollweg & Co.....	Dry goods, notions, etc.....	328 85
151.	J. R. Budd Company	Eggs, poultry	363 91
152.	American District Telegraph Co.....	Messenger services	80
153.	Charles E. Price	Milk	631 25
154.	Lion Compressed Yeast Co.....	72 lbs. yeast	18 00
155.	Century Biscuit Co.....	Crackers	276 55
156.	Daniel Stewart Co.....	Drugs	188 68
157.	Kingan & Co., Ltd.....	Sausages	141 80
158.	Huntington & Page	Florist's supplies	3 45
159.	Western Union Telegraph Co.....	Telegrams	2 37
160.	M. O'Connor & Company	Groceries, etc.....	1,524 30
161.	George F. Edenharter, Supt.....	Bills, labor, etc., settled	849 06
162.	George F. Edenharter, Supt.....	Main pay-roll, January, 1907....	8,440 53
163.	Frank G. Kamps, Jr.....	Oysters	404 40
164.	Indianapolis Abattoir Co.....	Beef, pork, etc.....	2,404 44
165.	Swift & Company	Ham, lard	1,025 30
166.	Frank G. Kamps, Sr.....	Fish, oysters	5 45
167.	A. B. Meyer & Co.....	Coal, coke	3,107 13
168.	The Indianapolis Gas Co.....	Gas	35 88
169.	Wm. B. Burford	Stationery	9 10
170.	D. Landreth Seed Company.....	Garden seed	73 11
171.	Vawter Hay and Grain Co.....	Feed and meal	122 81
172.	C. H. McDowell	Services as chaplain	20 00
173.	Indianapolis Water Co.....	Water	528 42
174.	L. A. Greiner & Son.....	Veterinary services	2 50
175.	Indianapolis Abattoir Co.....	Beef, etc.....	2,007 63
176.	Swift & Company	Hams	639 54
177.	American District Telegraph Co.....	Messenger services	1 15
178.	George T. Evans & Son.....	200 barrels flour	700 20
179.	Morris & Company	Pork loins, etc.....	553 51
180.	National Biscuit Co.....	Crackers	192 79
181.	Daniel Stewart Co.....	Drugs	148 66
182.	Francke Hardware Co.....	Hardware	33 54
183.	Hibben, Hollweg & Co.....	Rubber blankets, etc.....	979 54
184.	M. O'Connor & Company	Groceries, etc.....	1,950 73
185.	J. C. Perry	Canned goods, etc.....	347 60
186.	Techentin & Freiberg	Mending harness, etc.....	15 00
187.	Tutewiller & Son.....	Undertaking	7 00
188.	Lion Compressed Yeast Co.....	Yeast	16 00
189.	Kingan & Co., Ltd.....	Sausages	142 76
190.	George Hitz & Co.....	Potatoes, etc.....	459 22
191.	Charles E. Price	Milk	574 13
192.	Central Rubber & Supply Co.....	Electric lamps	84 00
193.	Hollweg & Reese	Queensware	96 60
194.	The A. Burdsal Co.....	Gasoline	1 80
195.	J. R. Budd Company	Eggs, poultry	311 39
196.	The Indianapolis News	Advertising	1 80
197.	Star Publishing Co.....	Advertising	1 50
198.	A. Booth & Co.....	Oysters	348 00
199.	The Geiger-Tinney Co.....	Coffee	753 11
200.	J. Ellwood Lee Co.....	Medical supplies	64 30
201.	M. C. Hunt.....	Chip soap	334 93
202.	Armour & Company	Oleomargarine, etc.....	709 38
203.	George F. Edenharter, Supt.....	Expense bills, etc.....	938 34
204.	George F. Edenharter, Supt.....	Main pay-roll, February, 1907....	8,350 17

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
205.	A. B. Meyer & Co.....	Coal, lime, etc.....	\$3,387 44
206.	The A. Burdsal Company	Gasoline	1 90
207.	John O'Neill	Flour	229 20
208.	The Acme Milling Co.....	Flour	427 70
209.	Vawter Hay and Grain Co.....	Meal and bran	32 00
210.	Geo. D. Hardin	Straw	60 90
211.	Chas. Bailly	Hay	200 88
212.	Capitol Paper Co.....	Toilet paper	10 50
213.	C. H. McDowell	Services as chaplain	25 00
214.	Charles G. Grah	Barber supplies	4 70
215.	Daniel Stewart Co.....	Medical supplies	24 65
216.	Charles D. Pearson & Co.....	Queensware	85 25
217.	Harmon & Hall	Plows and plow points.....	20 00
218.	The Albert Gall Co.....	Window shades	1 70
219.	John B. Bright & Son.....	Tea	258 21
220.	Huntington & Page	Flower pots, etc.....	7 85
221.	Crescent Oil Co.....	Oil	57 20
222.	Singer Sewing Machine Co.....	Oil cans	30
223.	The Indianapolis News	Advertising	1 77
224.	John W. Neumann & Co.....	Potatoes	388 20
225.	J. C. Perry & Co.....	Canned corn	72 50
226.	The H. Lieber Company	Photograph plates	1 80
227.	A. Booth & Co.....	Standard oysters	297 10
228.	Swift & Company	Hams and bacon	720 87
229.	Wm. H. Armstrong & Co.....	Rolling chairs, etc.....	121 20
230.	The Indianapolis Gas Co.....	Gas	35 07
231.	Frank G. Kamps, Sr.....	Fish	2 10
232.	M. C. Hunt	Chip soap, etc.....	538 59
233.	A. Keifer Drug Co.....	Drugs, etc.....	188 74
234.	Indianapolis Abattoir Co.....	Beef, lard, etc.....	2,930 95
235.	Indianapolis Water Co.....	Water	394 20
236.	Techentin & Freiberg	Harness, etc.....	98 45
237.	Geo. Hitz & Co.....	Fresh fruit, etc.....	139 61
238.	Havens & Geddes Co.....	Dry goods, etc.....	495 73
239.	National Biscuit Co.....	Crackers	184 63
240.	Hibben, Hollweg & Co.....	Napkins	101 75
241.	M. O'Connor & Co.....	Groceries, etc.....	1,868 64
242.	Francke Hardware Co.....	Hardware	78 86
243.	Kingan & Co., Ltd.....	Sausages	151 60
244.	Kipp-Link Phonograph Co.....	Mending music boxes, etc.....	13 80
245.	Lion Compressed Yeast Co.....	Yeast	16 25
246.	Charles E. Price	Milk	646 00
247.	Bausch-Lomb Optical Co.....	Medical supplies	3 24
248.	Indianapolis Poultry Co.....	Eggs	402 00
249.	Star Publishing Co.....	Advertising	2 00
250.	L. A. Greiner & Son.....	Veterinary services	2 50
251.	A. B. Meyer & Co.....	Coal, lime, etc.....	3,790 15
252.	Geo. F. Edenharter, Supt.....	Expense bills, etc.....	1,483 80
253.	J. R. Budd Company	Poultry	60 70
254.	Western Union Telegraph Co.....	Telegrams	1 29
255.	Armour & Company	Oleomargarine	736 00
256.	Geo. F. Edenharter, Supt.....	Main pay-roll	8,674 97
257.	Vawter Hay and Grain Co.....	Oats and meal	75 00
258.	Acme Milling Co.....	Winter wheat flour	359 70
259.	Century Biscuit Co.....	Crackers	156 15
260.	John O'Neill	Spring wheat flour	227 40
261.	Wm. B. Burford	Stationery and printing	226 69
262.	Indianapolis Water Co.....	Water	377 67
263.	Star Publishing Co.....	Advertising	2 00

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
264.	Indianapolis News	Advertising	\$1 77
265.	A. Booth & Co.	Fish	210 44
266.	Hollweg & Reese	Queensware	55 93
267.	Joseph Gardner	Granite bucket, etc.	187 01
268.	J. C. Perry & Co.	Evaporated peaches	260 00
269.	Bresette-Dugan Co.	Surgical instruments	4 75
270.	Hibben, Hollweg & Co.	Baseball shirts	8 70
271.	F. G. Kamps, Sr.	Fish	6 00
272.	Indianapolis Poultry Co.	Eggs	230 40
273.	Huntington & Page	Grass seed, etc.	15 23
274.	Indianapolis Gas Co.	Gas	36 69
275.	J. Ellwood Lee Co.	Medical supplies	70 84
276.	Swift & Co.	Hams and bacon	677 43
277.	J. R. Budd Co.	Poultry	24 90
278.	The Olds Soap Co.	Chip soap	378 52
279.	Kipp Bros. Co.	Picnic balls	36 00
280.	Capital Paper Co.	Toilet paper	5 25
281.	A. Keifer Drug Co.	Drugs	325 12
282.	National Ammonia Co.	Aqua ammonia	37 00
283.	Indianapolis Telephone Co.	Rental and tolls	20 85
284.	Central Union Telephone Co.	Rental and tolls	56 33
285.	Wm. H. Armstrong Co.	Surgical instruments	1 80
286.	Havens & Geddes Co.	Sheetings, etc.	65 71
287.	The E. C. Dolmetsch Co.	Spectacles, baseballs, etc.	66 50
288.	A. Burdsal Co.	Gasoline	4 00
289.	Canby, Ash & Canby Co.	Coffee	515 50
290.	Bobbs-Merrill Co.	Medical books	3 65
291.	Armour & Co.	Butterine	690 00
292.	Kingan & Co., Ltd.	Sausages	122 60
293.	Lion Compressed Yeast Co.	Yeast	17 50
294.	Geo. Hitz & Co.	Potatoes	405 86
295.	Morris & Co.	Beef and veal.	2,008 86
296.	L. A. Greiner & Son.	Veterinary services	14 50
297.	Indianapolis Abattoir Co.	Pork, lard, etc.	890 59
298.	M. O'Connor & Co.	Groceries, etc.	2,379 60
299.	Chas. E. Price	Milk	651 38
300.	A. B. Meyer & Co.	Coal	3,654 86
301.	Crescent Oil Co.	Engine oil	10 50
302.	Saks & Company.	Baseball caps and hose.	6 00
303.	Hide, Leather and Belting Co.	Electric lamps	75 00
304.	H. J. Heinz Co.	Vinegar, pickles, etc.	41 64
305.	Francke Hardware Co.	Upholstering buttons	1 00
306.	C. H. McDowell	Services as chaplain.	20 00
307.	D. H. Davis	Services as trustee.	100 00
308.	Eli Marvin	Services as trustee.	89 20
309.	Geo. B. Lockwood	Services as trustee.	85 00
310.	Simon P. Neidigh	Street car fares for quarter.	10 50
311.	Sargent Paint & Color Co.	Painters' supplies	118 16
312.	Geo. F. Edenharter, Supt.	Expense bills, etc.	839 12
313.	Geo. F. Edenharter, Supt.	Main payroll	8,618 73
314.	Hatfield Electric Co.	Electrical supplies	48 49
315.	John W. Coons	Fire extinguishers	138 20
316.	Indiana Reformatory	Brooms	66 00
317.	Wm. B. Burford	Stationery	269 80
318.	Horlick's Malted Milk Co.	Malted milk	30 00
319.	The Bernd Bros. Co.	Push cart	55 00
320.	The Standard Oil Co.	Oils	47 89
321.	The Sanitas Co.	Moth powder	50 30
322.	Acme Milling Co.	Flour	408 00

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
323.	Peter Woll & Son Mfg. Co.....	Upholsterer hair	\$432 07
324.	The American Tent & Awning Co..	Hanging and repairing awnings	20 00
325.	J. Ellwood Lee Co.....	Gauze bandages	90 00
326.	John O'Neill	Flour	229 80
327.	Geo. H. Swain	Seed corn	3 00
328.	Francke Hardware Co.....	Pantasote, etc.	31 75
329.	L. E. Morrison & Co.....	Rubber blankets	122 50
330.	Capital Paper Co.....	Toilet paper	5 25
331.	Badger Furniture Co.....	Settees	18 75
332.	Charles D. Pearson.....	Tumblers	4 50
333.	Hollweg & Reese.....	Queensware	73 45
334.	L. E. Haag.....	Vaccine lymph	6 96
335.	A. Burdsal Co.....	Gasoline	1 00
336.	Kipp Bros. Co.....	Flags and whistles.....	28 00
337.	M. C. Hunt.....	Chip soap and sal soda.....	569 80
338.	Jas. L. Keach.....	Lemons	19 60
339.	The Indianapolis Gas Co.....	Gas	37 50
340.	The Indianapolis News.....	Advertising	2 07
341.	Star Publishing Co.....	Advertising	2 00
342.	F. J. Mack & Co.....	Painting	467 00
343.	Indianapolis Water Co.....	Water	421 76
344.	C. H. McDowell.....	Services as chaplain.....	20 00
345.	Vawter Hay & Grain Co.....	Corn and meal.....	90 43
346.	Armour & Co.....	Butterine	690 00
347.	Geo. Hitz & Co.....	Potatoes and apples.....	663 31
348.	Century Biscuit Co.....	Crackers	201 00
349.	Indianapolis Abattoir Co.....	Beef, pork, lard and bacon...	3,069 36
350.	Lion Compressed Yeast Co.....	Yeast	17 25
351.	Kingan & Co., Ltd.....	Sausage and bologna.....	182 92
352.	Western Union Tel. Co.....	Telegrams	1 02
353.	Charles E. Price.....	Milk	676 50
354.	M. O'Connor & Co.....	Groceries, etc.	289 65
355.	The Daniel Stewart Co.....	Drugs	64 38
356.	Havens & Geddes Co.....	House furnishings	250 52
357.	Independent Fish & Oyster Co.....	Fish	527 36
358.	J. R. Budd Co.....	Eggs and dressed poultry.....	309 00
359.	J. C. Perry & Co.....	Groceries	1,534 78
360.	Swift & Co.....	Hams	815 85
361.	Vonnegut Hardware Co.....	Hardware	107 38
362.	A. B. Meyer & Co.....	Coal and plaster.....	2,717 67
363.	The Albert Gall Co.....	Carpet	37 69
364.	Tutewiler & Son.....	Undertaking	14 00
365.	Geo. F. Edenharter, Supt.....	Expense bills, etc.....	853 52
366.	Geo. F. Edenharter, Supt.....	Main payroll	8,646 97
367.	John B. Bright & Son.....	Tea	216 58
368.	John O'Neill	Rye flour	13 15
369.	Geo. H. Swain	Seed corn	3 95
370.	Acme Milling Co.....	Flour	466 40
371.	The Geiger-Tinney Co.....	Coffee	473 79
372.	Vawter Hay & Grain Co.....	Meats and feed.....	87 50
373.	Charles D. Pearson & Co.....	Queensware	156 50
374.	Techintin & Freiberg.....	Leather straps, etc.....	10 50
375.	Kipp Bros. Co.....	Lancer, matches	37 50
376.	C. H. McDowell.....	Services as chaplain.....	25 00
377.	Indianapolis Water Co.....	Water	383 73
378.	Central Union Telephone Co.....	Telephone service	56 73
379.	Indianapolis Telephone Co.....	Telephone service	21 20
380.	Star Publishing Co	Advertising	2 00
381.	The Indianapolis News.....	Advertising	1 53

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
382.	Wm. Armstrong Co.....	Elastic stocking	\$3 60
383.	A. Birdsall Co.....	Gasoline and asphalt.....	6 00
384.	E. C. Dolmetsch Co.....	Tennis balls	4 00
385.	Havens & Geddes Co.....	Dry goods, etc.....	232 40
386.	Indianapolis Poultry Co.....	Eggs	208 80
387.	F. G. Kamps, Sr.....	Fish	7 95
388.	Armour & Co.....	Butterine	690 00
389.	The Indianapolis Gas Co.....	Gas	32 55
390.	Hibben, Hollweg & Co.....	Dry goods, etc.....	602 95
391.	A. Kiefer Drug Co.....	Drugs, etc.....	143 78
392.	J. C. Perry & Co.....	Groceries, etc.....	1,576 46
393.	F. G. Kamps, Jr.....	Fish	287 36
394.	Geo. D. Hardin.....	Hay	205 35
395.	Western Union Telegraph Co.....	Telegrams	1 47
396.	M. O'Connor & Co.....	Grocers' sundries	977 53
397.	Geo. T. Evans & Son.....	Flour	294 00
398.	M. C. Hunt.....	Chip soap	482 99
399.	Indianapolis Abattoir Co.....	Lard, pork, hams and bacon...	1,643 86
400.	Nelson Morris & Co.....	Beef and veal.....	2,446 83
401.	Geo. Hitz & Co.....	Strawberries	16 75
402.	The National Ammonia Co.....	Aqua Ammonia	37 00
403.	National Biscuit Co.....	Crackers	186 61
404.	J. B. Budd Co.....	Dressed poultry	23 88
405.	J. L. Keach	Fruit and produce.....	851 45
406.	Charles E. Price.....	Fresh milk	654 63
407.	Sam Blum	Tomato plants	17 50
408.	Tutewiler & Son.....	Undertaking	14 00
409.	Acme Milling Co.....	Flour	84 80
410.	Kirkhoff Bros. Co.....	Lavatory and fittings.....	116 94
411.	Lion Compressed Yeast Co.....	Yeast	17 63
412.	John Abrams	Painting	200 00
413.	Geo. F. Edenharter, Supt.....	Weekly payroll	971 44
414.	Wm. Robinson	Work with team.....	58 50
415.	A. B. Meyer & Co.....	Coal	1,183 18
416.	Kingan & Co., Ltd.....	Bologna	241 32
417.	Geo. F. Edenharter, Supt.....	Main payroll	8,790 27
418.	Indianapolis Star	Advertising	12 50
419.	The Indianapolis News.....	Advertising	14 56
420.	Indianapolis Water Co.....	Water	360 45
421.	Capital Paper Co.....	Toilet paper	15 75
422.	A. Kiefer Drug Co.....	Sal soda	48 36
423.	Wm. B. Burford.....	Stationery and printing.....	1,066 33
424.	Wulschner-Stewart Music Co.....	Music	9 00
425.	Geo. A. Nicholson & Co.....	Fresh fish	363 13
426.	John B. Bright & Son.....	Coffee	592 20
427.	Vawter Hay & Grain Co.....	Corn and meal.....	97 90
428.	Geo. T. Evans & Son.....	Flour	288 00
429.	Acme Milling Co.....	Flour	599 20
430.	H. J. Heinz Co.....	Vinegar	40 84
431.	A. Burdsal Co.....	Gasoline	1 80
432.	Wm. H. Armstrong Co.....	Medical supplies	11 25
433.	The Indianapolis Gas Co.....	Gas	33 18
434.	Charles D. Pearson & Co.....	Queensware	44 90
435.	Hibben, Hollweg & Co.....	Dry goods, etc.....	63 67
436.	D. H. Davis	Salary and expense.....	100 00
437.	Eli Marvin	Salary and expense.....	88 05
438.	Swift & Co.....	Hams, lard and bacon	1,116 00
439.	Nelson Morris & Co.....	Beef	1,961 32
440.	Charles G. Grah.....	Soaps, combs, etc.....	18 45

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
441.	L. E. Morrison & Co.....	Rubber gloves	\$0 96
442.	Francke Hardware Co.....	Hardware	11 03
443.	J. C. Perry & Co.....	Groceries	1,398 21
444.	Kipp Bros. Co.....	Hydrometers	3 00
445.	Armour & Co.....	Butterline	690 00
446.	J. R. Budd Co.....	Poultry and eggs.....	193 00
447.	M. O'Connor & Co.....	Canned goods, etc.....	682 80
448.	National Biscuit Co.....	Crackers	193 18
449.	J. L. Keach	Potatoes, etc.	652 84
450.	Daniel Stewart Co.....	Drugs	126 25
451.	A. B. Meyer & Co.....	Coal	1,848 04
452.	Simon P. Neidigh	Street car fares.....	10 00
453.	C. H. McDowell.....	Services as chaplain.....	20 00
454.	M. C. Hunt.....	Chip soap	233 86
455.	Charles E. Price	Milk	666 50
456.	Tutewiler & Son.....	Undertaking	14 00
457.	Lion Compressed Yeast Co.....	Yeast	16 00
458.	Kingan & Co., Ltd.....	Bologna	48 00
459.	Wm. Robinson	Mowing grass, etc.....	81 75
460.	Standard Oil Co.....	Oils	39 50
461.	Barrett Manufacturing Co.....	Ammonia	115 88
462.	Bausch & Lomb Optical Co.....	Medical supplies	7 32
463.	Geo. F. Edenharter, Supt.....	Expense bills, weekly payroll..	707 39
464.	Geo. F. Edenharter, Supt.....	Main payroll	8,786 28
465.	C. J. Gardner.....	Veal	445 46
466.	Adam Heimberger	Salary and expense.....	133 81
467.	Geo. B. Lockwood.....	Salary and expense.....	30 00
468.	Geo. H. Swain.....	Garden seeds	1 60
469.	H. J. Heinz Co.....	Vinegar	30 20
470.	Hollweg & Reese.....	Queensware	87 55
471.	Standard Oil Co.....	Oils	47 05
472.	Indiana Reformatory	Brooms	66 00
473.	John B. Bright & Son.....	Tea	180 57
474.	Acme Milling Co.....	Flour	551 60
475.	Geo. F. Evans & Son.....	Flour	296 40
476.	Vawter Hay & Grain Co.....	Oats, corn and meal.....	162 61
477.	Indianapolis Poultry Co.....	Eggs	216 00
478.	The Olds Soap Co.....	Chip soap	208 91
479.	Capital Paper Co.....	Toilet paper	5 25
480.	Parke, Davis & Co.....	Medical supplies	1 08
481.	Wm. Robinson	Cutting grass, etc.....	35 75
482.	Jack Norton	Repairs to smoke stack.....	355 00
483.	L. A. Greiner & Son.....	Veterinary services	5 00
484.	Indianapolis Water Co.....	Water	506 82
485.	Vondersaar & Co.....	Potatoes	729 85
486.	Daniel Stewart Co.....	Drugs	4 25
487.	The H. Lieber Co.....	Photographic supplies	3 60
488.	A. Burdsal Co.....	Gasoline	4 00
489.	F. G. Kamps, Sr.....	Fish	2 55
490.	The Indianapolis Gas Co.....	Gas	33 54
491.	A. Booth & Co.....	Fish	266 13
492.	C. J. Gardner.....	Veal	335 00
493.	Swift & Co.....	Bacon	20 50
494.	Sander & Recker Furniture Co.....	Bookcase	22 50
495.	Star Publishing Co.....	Advertising	1 50
496.	The Indianapolis News.....	Advertising	1 83
497.	A. B. Meyer & Co.....	Coal and lime.....	822 04
498.	A. Kiefer Drug Co.....	Drugs	121 49
499.	Armour & Co.....	Butterine	552 00

EXHIBIT No. 2—Continued.

<i>No.</i>	<i>Payable To.</i>	<i>What For.</i>	<i>Amount.</i>
500.	Nelson Morris & Co.....	Beef	\$1,849 78
501.	Wm. B. Burford.....	Stationery	281 39
502.	J. C. Perry & Co.....	Groceries	1,288 91
503.	Geo. Hitz & Co.....	Lemons, etc.	22 90
504.	Singer Sewing Machine Co.....	Needles, etc.	4 16
505.	Indianapolis Abattoir Co.....	Hams and lard.....	1,176 34
506.	National Biscuit Co.....	Crackers	255 46
507.	C. H. McDowell.....	Services as chaplain.....	20 00
508.	H. Raley, Manager.....	Cleaning vaults	15 00
509.	Charles E. Price.....	Milk	666 25
510.	J. R. Budd Co.....	Poultry	54 01
511.	Lion Compressed Yeast Co.....	Yeast	18 13
512.	Geo. F. Edenharter, Supt.....	Expense, bills, etc.....	730 30
513.	Geo. F. Edenharter, Supt.....	Main payroll	8,618 22
514.	Havens & Geddes Co.....	Blankets, etc.	1,365 61
515.	Hibben, Hollweg & Co.....	Blankets	1,279 50
516.	Kipp Bros. Co.....	Tennis racquets, etc.....	48 75
517.	J. C. Perry & Co.....	Groceries	1,992 96
518.	Francke Hardware Co.....	Rakes, etc.	7 70
519.	Armour & Co.....	Butterine	690 00
520.	J. L. Keach.....	Potatoes, melons, etc.....	344 68
521.	A. Keifer Drug Co.....	Drugs	228 60
522.	Daniel Stewart Co.....	Sal soda, etc.....	31 08
523.	The A. Burdsal Co.....	Gasoline	2 00
524.	Star Publishing Co.....	Legal notice	1 50
525.	The Indianapolis News.....	Legal notice	3 36
526.	Capital Paper Co.....	Toilet paper	5 25
527.	The Olds Soap Co.....	Soap	277 21
528.	The Taylor Carpet Co.....	Linoleum	51 64
529.	Charles D. Pearson & Co.....	Queensware	34 92
530.	Acme Milling Co.....	Flour	638 40
531.	John O'Neill	Flour	285 00
532.	The Geiger-Tinney Co.....	Coffee	246 39
533.	H. J. Heinz Co.....	Vinegar	35 33
534.	L. E. Haag.....	Vaccine lymph	2 32
535.	Tutewiler & Son.....	Undertaking	7 00
536.	Lion Compressed Yeast Co.....	Yeast	13 38
537.	Indianapolis Telephone Co.....	Telephone tolls	70
538.	Central Union Telephone Co.....	Telephone tolls	1 15
539.	M. O'Connor & Co.....	Laundry supplies	101 15
540.	Indianapolis Water Co.....	Water	422 21
541.	The Indianapolis Gas Co.....	Gas	38 40
542.	Swift & Co.....	Bacon	24 81
543.	C. J. Gardner.....	Veal	348 78
544.	Geo. Hitz & Co.....	Melons, etc.	100 65
545.	A. B. Meyer & Co.....	Coal and coke.....	1,400 53
546.	Adolph Scherrer	Professional services	16 65
547.	American District Tel. Co.....	Messenger service	15
548.	National Biscuit Co.....	Crackers	167 62
549.	Techentin & Freiberg.....	Harness, etc.	26 80
550.	Indianapolis Abattoir Co.....	Beef, hams, and lard.....	2,347 97
551.	Western Union Tel. Co.....	Telegrams	4 61
552.	C. H. McDowell	Services as chaplain.....	25 00
553.	Simon P. Neidigh	Street car fares.....	8 00
554.	D. H. Davis.....	Salary and expense.....	77 00
555.	Eli Marvin	Salary and expense.....	58 75
556.	Thos. A. Clifton.....	Salary and expense.....	38 96
557.	Indianapolis Poultry Co.....	Eggs	259 20
558.	H. T. Conde Implement Co.....	Station wagon	502 20

EXHIBIT No. 2—Continued.

No.	Payable To.	What For.	Amount.
559.	Wm. B. Burford.....	Stationery	\$126 94
560.	L. A. Greiner & Son.....	Liniment	2 00
561.	Charles E. Price.....	Milk	643 88
562.	J. R. Budd Co.....	Poultry	45 96
563.	Adam Heimberger	Salary and expense.....	66 86
564.	Geo. F. Edenharter, Supt.....	Expense bills, weekly payroll.	722 40
565.	Geo. F. Edenharter, Supt.....	Main payroll	8,580 73

Total amount of expenditures from the Maintenance Fund for
eleven months ending September 30, 1907..... \$278,325 08

EXHIBIT No. 3.

VOUCHERS PAID FROM REPAIR FUND FOR EXPENDITURES
DURING THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

No.	Payable To.	What For.	Amount.
1.	Fairbanks, Morse & Co.....	Motor repairs	\$8 00
2.	The American Laundry Mach. Co...	Work in laundry	112 26
3.	Adolph Scherrer	For services rendered.....	16 77
4.	Joseph Gardner	Tinners' stock	36 25
5.	Knight & Jillson Co.....	Supplies	36 72
6.	Kirkhoff Bros. & Co.....	Plumbing, etc.	458 45
7.	Hatfield Electric Co.....	Electric repairs	60 58
8.	The Platt Iron Works Co.....	Repair for pump.....	59 40
9.	Fred H. Loakmann.....	Cement work	710 40
10.	Central Supply Co.....	Plumbing materials, etc.....	117 94
11.	A. Keifer Drug Co.....	Painters' supplies	103 00
12.	Chas. F. Welking & Co.....	Repair brick work, etc.....	107 73
13.	Acme Carriage & Wagon Works.....	Repairs, shoeing, etc.....	31 45
14.	The Sinker-Davis Co.....	Repair material	61 50
15.	F. H. Cheyne Electric Co.....	Repair materials	20 80
16.	Chas. J. Aufderheide.....	Repair bathroom, new shed, etc.	1,401 85
17.	Geo. F. Endenharter, Supt.....	Repair payroll, Nov., 1906.....	385 35
18.	Chas. J. Aufderheide	Repair floors, etc.....	559 24
19.	Knight & Jillson Co.....	Plumbing repairs, etc.....	235 98
20.	Kirkhoff Bros. & Co.....	Plumbing, etc.	226 12
21.	Hatfield Electric Co.....	Electric repairs	17 20
22.	Francke Hardware Co.....	Hardware	86 00
23.	The Sinker-Davis Co.....	Repair materials	11 80
24.	The Stirling Consolidated Boiler Co..	Boiler repairs	55 00
25.	Geo. F. Edenharter, Supt.....	Repair payroll, December, 1906	389 75
26.	Acme Carriage & Wagon Works.....	Repairs, shoeing, etc.....	44 40
27.	William Robinson	Hauling with teams.....	92 75
28.	D. V. Reedy & Co.....	Repair elevator	26 30
29.	Fred H. Loakmann.....	Cement floors, bathroom, etc..	535 40
30.	Charles J. Aufderheide	Carpenter work repairs, etc....	1,404 67
31.	The Anderson Bruner Co.....	Repair sewer, etc.....	45 00
32.	Joseph Gardner	Tinners' stock	122 40
33.	Knight & Jillson Co.....	Water fittings	4 50
34.	Hide, Leather & Belting Co.....	Belting	65 41
35.	Fred H. Loakmann.....	Cement repairs, etc.....	301 90
36.	Balke & Krause Co.....	400 wood casters	40 00
37.	William Robinson	Grading, etc.	24 00

EXHIBIT No. 3—Continued.

No.	Payable To.	What For.	Amount.
38.	Acme Carriage & Wagon Works.....	Repair, shoeing, etc.....	\$41 90
39.	Central Supply Co.....	Repair material	109 03
40.	Kirkhoff Bros. & Co.....	Plumbing repairs	252 40
41.	Geo. F. Edenharter, Supt.....	Repair payroll, January, 1907..	418 25
42.	The Sinkers-Davis Co.....	Boiler repairs	35 80
43.	American Laundry Machine Co.....	Repair laundry	54 50
44.	D. V. Reedy & Co.....	Repairs on elevator, etc.....	143 87
45.	Henry Voght Machine Co.....	Ice plant repairs.....	72 53
46.	The Jeffrey Mfg. Co.....	Coal crusher repairs.....	123 00
47.	The Babcock & Wilcox Co.....	Manhole gaskets	25 00
48.	Joseph Gardner	Tinners' supplies.....	119 25
49.	Wm. Ehrich	Repair stores, etc.....	30 69
50.	The Sinkers-Davis Co.....	Repair boilers.....	7 20
51.	F. H. Cheyne Electric Co.....	Electric materials	129 28
52.	Kirkhoff Bros. & Co.....	Plumbing, etc.	42 35
53.	Acme Carriage & Wagon Works....	Repairs, shoeing, etc.....	44 45
54.	Chas F. Welking Co.....	Repair boiler house.....	197 90
55.	Central Supply Co.....	Plumbing material, etc.....	181 67
56.	Geo. F. Edenharter, Supt.....	Repair payroll, February, 1907..	408 35
57.	The A. Bruner Co.....	Repair sewers	8 00
58.	Hide Leather & Belting Co.....	Belting	14 40
59.	Royce Electric Co.....	Electric repairs	3 45
60.	Simplex Electric Heating Co.....	Electric irons, 110 volts.....	30 38
61.	Central Supply Co.....	1-12 section radiator.....	18 63
62.	The Platt Iron Works Co.....	Supplies for pump.....	28 00
63.	Joseph Gardner	Tinners' supplies	4 80
64.	Knight & Jillson Co.....	Plumbing repairs, etc.....	147 32
65.	A. Schiffling	Repairs, sharpening mowers...	14 00
66.	The Sinkers-Davis Co.....	Repair boilers, etc.....	15 95
67.	Kirkhoff Bros. & Co.....	Plumbing material	34 30
68.	American Laundry Machinery Co....	Castings	3 50
69.	Acme Carriage and Wagon Works...	Repairs to machinery, shoeing.	42 30
70.	Geo. F. Edenharter, Supt.....	Repair payroll, March, 1907....	444 15
71.	Acme Carriage & Wagon Works....	Repairs, shoeing, etc.....	75 45
72.	American Laundry Machinery Co....	Repairs, castings, etc.....	32 20
73.	Chas. G. Grah.....	Repairs, scissors, etc.....	1 00
74.	Henry Voght Machine Co.....	Repairs for ammonia pump....	20 55
75.	William Ehrich	Repair for stove	1 50
76.	Kipp Link Phonograph Co.....	Repair on phonographs.....	3 50
77.	Vonnegut Hardware Co.....	Hardware	49 17
78.	Central Supply Co.....	Engineers' supplies	184 82
79.	The Sinkers-Davis Co.....	Repairs, fuel plates, etc.....	120 65
80.	Geo. F. Edenharter, Supt.....	Repair payroll, April, 1907.....	407 00
81.	Babcock & Wilcox Co.....	Water turbine repairs.....	159 90
82.	Enterprise Foundry & Fence Co.....	Repair on fence.....	5 70
83.	Hatfield Electric Co.....	Repair electric fans	3 20
84.	The John Van Range Co.....	Repair on range.....	7 44
85.	Wm. H. Armstrong Co.....	Repair on knives and scissors.	1 50
86.	Sargent Paint & Color Co.....	Lead, oil and turpentine.....	288 58
87.	Knight & Jillson Co.....	Engineers' supplies	67 49
88.	The Sinkers-Davis Co.....	Engineers' supplies	22 20
89.	Joseph Gardner	Tinware and galvanized iron..	17 35
90.	Acme Carriage & Wagon Works....	Repair, shoeing, etc.....	50 15
91.	Geo. F. Edenharter, Supt.....	Repair payroll for May, 1907..	451 05
92.	The A. Bruner Co.....	Repair on sewer	8 00
93.	Hide, Leather & Belting Co.....	Belting	72 60
94.	Daniel Stewart Co.....	White lead	144 50
95.	Vonnegut Hardware Co.....	Hardware, etc.	14 81
96.	Francke Hardware Co.....	Hardware, etc.	20 67

EXHIBIT No. 3—Continued.

No.	Payable To.	What For.	Amount.
97.	The Sinker-Davis Co.....	Repairs on heater.....	\$277 16
98.	Knight & Jillson Co.....	Engineers' supplies	294 70
99.	Joseph Gardner	Tinners' supplies	77 25
100.	A. Schiffing	Repair of lawn mowers.....	10 00
101.	Jack Norton	Repairs on smoke stack.....	225 00
102.	The Babcock Wilcox Co.....	Repairs for 3¼-inch turbine....	33 13
103.	Acme Carriage & Wagon Works...	Repairs, shoeing, etc.....	36 45
104.	Geo. F. Edenharter, Supt.....	Repair payroll	428 65
105.	Wm. M. McNealey.....	Labor and cement work.....	37 00
106.	Joseph Gardner	Repairs and material	3,898 50
107.	John Abrams	Painting swings	70 00
108.	The A. Bruner Company.....	Repairs on sewer.....	5 00
109.	The Babcock-Wilcox Co.....	Repairs for turbine.....	56 00
110.	Central Supply Co.....	Engineers' supplies	8 88
111.	The Sinker-Davis Co.....	Boiler repairs, etc.....	24 30
112.	Irvin, Robbins & Co.....	Repairs to carriage	2 25
113.	F. H. Cheyne Electric Co.....	Repairs for electric plant.....	27 70
114.	Knight & Jillson Co.....	Plumbing supplies, etc.....	8 25
115.	Hatfield Electric Co.....	Electric repairs	96 26
116.	Acme Carriage & Wagon Works...	Repairs, shoeing, etc.....	27 85
117.	Geo. F. Edenharter, Supt.....	Repair payroll	422 46
118.	Remington Typewriter Co.....	Repair to typewriter	11 75
119.	Joseph Gardner	Solder	33 50
120.	Hide & Leather Belting Co.....	Repairs for boiler cleaner	9 98
121.	The Sinker-Davis Co.....	Repairing boiler, etc.....	122 55
122.	The Central Supply Co.....	Steam fittings, etc.....	104 81
123.	Acme Carriage & Wagon Works...	Repairs, shoeing, etc.....	43 30
124.	Geo. F. Edenharter, Supt.....	Repair payroll	417 85
125.	Hatfield Electric Co.....	Electric repairs	4 50
126.	Knight & Jillson Co.....	Plumbers' supplies, etc.....	253 13
127.	Hide, Yeather & Belting Co.....	Repair on belts.....	1 80
128.	Daniel Stewart Co.....	Window glass, etc.....	1 25
129.	William Ehrich	Repairs on range.....	1 00
130.	Hatfield Electric Co.....	Lamp cord	16 28
131.	Sander & Recker Furniture Co.....	Repair of roll top desk.....	2 40
132.	Singer Sewing Machine Co.....	Repairs on sewing machines...	1 45
133.	The Sinker-Davis Co.....	Boiler repairs, etc.....	223 94
134.	Acme Carriage & Wagon Works.....	Repairs, shoeing, etc.....	19 25
135.	The Babcock & Wilcox Co.....	Gaskets	25 00
136.	Vonnegut Hardware Co.....	Die machine	213 75
137.	F. J. Mack & Co.....	Painting barber shop	39 00
138.	Kirkhoff Bros. & Co.....	Plumbing, etc.	73 52
139.	Charles F. Wehking Co.....	Brick work at boiler house....	193 47
140.	Geo. F. Edenharter, Supt.....	Repair payroll	384 00

Total amount of vouchers paid from repair fund for the eleven months ending September 30, 1907 \$21,774 35

EXHIBIT NO. 4.

VOUCHERS PAID FROM CLOTHING FUND FOR EXPENDITURES
DURING THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

No.	Payable To.	What For.	Amount.
1.	Stouts Factory Shoe Store Co.....	200 pairs shoes	\$250 00
2.	Simon Pink	49 pairs rubber boots	148 96
3.	Central Rubber & Supply Co.....	Rubber coats	75 85
4.	L. E. Morrison & Co.....	1 pair hip boots.....	5 00
5.	W. K. Schwartz	201 pairs pants	251 25
6.	Havens & Geddes Co.....	Dry goods, notions, etc.....	446 90
7.	Hibben, Hollweg & Co.....	Collars, bows, etc.....	137 65
8.	Geo. F. Edenharter, Supt.....	Clothing payroll, Nov., 1906....	168 00
9.	Hibben, Hollweg & Co.....	Gents' furnishing goods, etc....	250 63
10.	Havens & Geddes Co.....	Hoods, hose, etc.....	54 42
11.	A. P. Hendrickson Hat Co.....	Hats, caps, etc.....	67 50
12.	J. A. Ehrensperger & Co.....	Shoes	5 50
13.	Nathan Plant & Co.....	Slippers and shoes.....	282 50
14.	Peter Neetz	Mending shoes	12 35
15.	Geo. F. Edenharter, Supt.....	Clothing payroll, Decemehr, 1906	183 35
16.	Nathan Plant & Co.....	Shoes	375 00
17.	Hibben, Hollweg & Co.....	Dry goods, clothing, etc.....	434 18
18.	Indiana Reformatory	Clothing	1,191 75
19.	Geo. F. Edenharter, Supt.....	Clothing payroll, January, 1907.	184 00
20.	Peter Neetz	Mending shoes	17 75
21.	Nathan Plant & Co.....	Shoes	125 00
22.	Saks & Co.....	Suits, clothing, etc.....	1,455 20
23.	Hibben, Hollweg & Co.....	Dry goods, etc.....	585 84
24.	Peter Nutz	Mending shoes	22 50
25.	Geo. F. Edenharter, Supt.....	Clothing payroll, February, 1907	170 00
26.	J. A. Ehrensperger & Co.....	100 pair shoes	125 00
27.	Havens & Geddes Co.....	Dry goods, notions, etc.....	383 39
28.	Hibben, Hollweg & Co.....	Suspenders, gloves, etc.....	330 54
29.	Peter Nutz	Mending shoes	16 55
30.	Geo. F. Edenharter, Supt.....	Clothing payroll, March, 1907...	170 00
31.	Peter Nutz	Mending shoes	14 90
32.	Nathan Plant & Co.....	Shoes	125 00
33.	Hibben, Hollweg & Co.....	Hosiery, etc.	140 53
34.	Havens & Geddes Co.....	Dry goods, clothing, etc.....	495 50
35.	Geo. F. Edenharter, Supt.....	Clothing payroll for April, 1907.	169 50
36.	Nathan Plant & Co.....	Shoes	250 00
37.	A. P. Hendrickson Hat Co.....	Straw hats	31 00
38.	Peter Nutz	Mending shoes	30 35
39.	Hibben, Hollweg & Co.....	Dry goods, clothing, etc.....	347 09
40.	Havens & Geddes Co.....	Buttons	35 35
41.	Geo. F. Edenharter, Supt.....	Clothing payroll for May, 1907..	170 55
42.	Nathan Plant & Co.....	Women's shoes	125 00
43.	J. A. Ehrensperger & Co.....	Men's shoes	125 00
44.	Havens & Geddes Co.....	Clothing, etc	232 33
45.	Peter Nutz	Mending shoes	10 20
46.	Geo. F. Edenharter, Supt.....	Clothing payroll	184 60
47.	Hibben, Hollweg & Co.....	Combs	9 30
48.	Havens & Geddes Co.....	Pearl buttons	7 29
49.	Peter Nutz	Repairing shoes	15 00
50.	Geo. F. Edenharter, Supt.....	Clothing payroll	169 25
51.	Peter Nutz	Mending shoes	21 50
52.	Geo. F. Edenharter, Supt.....	Clothing payroll	161 75
53.	Havens & Geddes Co.....	Muslins, hose, etc.....	472 59

EXHIBIT No. 4—Continued.

No.	Payable To.	What For.	Amount.
54.	Hibben, Hollweg & Co.....	Suspenders, etc.....	\$73 44
55.	Saks & Co.....	Men's suits	450 00
56.	L. Strauss & Co.....	Men's suits	450 00
57.	J. A. Ehrensperger & Co.....	Men's Shoes	250 00
58.	Nathan Plant & Co.....	Women's shoes	125 00
59.	Peter Nutz	Mending shoes	15 50
60.	Geo. F. Edenharter, Supt.....	Clothing payroll	159 50

Total vouchers paid from clothing fund for eleven months ending September 30, 1907..... \$12,793 58

EXHIBIT No. 5.

BALANCE SHEET, SEPTEMBER 30, 1907, CENTRAL INDIANA HOSPITAL FOR INSANE.

Central Indiana Hospital for Insane.....	\$2,319,004 25
Real estate	\$1,634,250 00
Personal property	377,999 70
Maintenance	3,578 62
Repair	1,142 32
Clothing	39 75
Clothing account	101 93
Repair materials	21,128 94
Ward supplies	2,278 20
Laundry supplies	6,060 24
Engineers' supplies	948 29
Medical supplies	2,396 07
House furnishings	402 51
Light	402 51
Fuel	32,349 78
Salaries and wages.....	109,634 84
Newspaper, etc.	451 05
Telephone, telegraph, etc.....	258 35
Stable, farm, etc.....	2,660 43
Incidental expense	1,607 32
Fire department	238 20
Stationery	2,154 73
Water	4,619 05
Subsistence	105,224 67
Earnings	2,022 76
Eli Marvin	2,022 76
	<hr/>
	\$2,321,027 01 \$2,321,027 01

EXHIBIT No. 6.

PAYROLL 1906-1907, BY DEPARTMENTS AND FUNDS.

DEPARTMENT.	Extra Labor	Maintenance.	Repairs.	Clothing.	Total.
Officers.....	\$25 00	\$19,205 91			\$19,230 91
Department for men.....		22,330 55			22,330 55
Department for women.....		18,332 05			18,332 05
Hospital for sick insane.....		6,384 15			6,384 15
House department.....		2,773 90			2,773 90
Kitchen department.....		3,741 60			3,741 60
Dining department.....		3,320 85			3,320 85
Laundry.....		5,452 65			5,452 65
Garden and florist department.....		3,417 55			3,417 55
Clothing department.....				\$1,890 50	1,890 50
Carpenter department.....	1,171 65		\$2,236 61		3,408 26
Engineer's department.....	6,667 65	2,468 50	1,508 15		10,644 30
Electrical department.....		1,284 50			1,284 50
Bakery.....	18 00	1,314 35			1,332 35
Police department.....		1,537 00			1,537 00
Tinner's department.....			812 10		812 10
Upholsterer, barber, butcher, porter, delivery, junk, pathological, detail ...}	30 00	2,577 45			2,607 45
Total.....	\$7,912 30	\$94,141 01	\$4,556 86	\$1,890 50	\$108,500 67
Less extra labor.....					7,912 30
Total regular payroll.....					\$100,588 37

EXHIBIT No. 7.

ACCOUNTS WITH SUNDRY COUNTIES FOR CLOTHING AND UNDERTAKING FURNISHED TO PATIENTS DURING THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

Allen County	\$21 65
Bartholomew County	369 45
Benton County	90 70
Boone County	147 60
Brown County	137 10
Carroll County	157 90
Clarke County	242 65
Clay County	351 30
Clinton County	231 95
Crawford County	11 25
Daviess County	14 05
Dearborn County	279 60
Dubois County	9 45
Floyd County	345 80
Fountain County	210 35
Franklin County	8 85
Hamilton County	303 05

EXHIBIT No. 7—Continued.

Hancock County	\$200 35
Harrison County	11 50
Hendricks County	193 00
Howard County	233 50
Huntington County	15 90
Jackson County	345 65
Jefferson County	206 30
Jennings County	145 65
Johnson County	143 40
Knox County	60
Lawrence County	141 15
Laporte County	11 70
Marion County	2,612 85
Monroe County	156 05
Montgomery County	200 40
Morgan County	221 85
Martin County	5 15
Noble County	25 90
Owen County	150 65
Ohio County	58 65
Parke County	262 45
Perry County	3 85
Putnam County	167 90
Ripley County	267 45
Scott County	33 65
Shelby County	255 85
Spencer County	12 20
Steuben County	1 85
St. Joseph County.....	13 85
Sullivan County	9 10
Switzerland County	150 30
Tippecanoe County	389 55
Tipton County	88 70
Vermillion County	98 00
Vigo County	863 40
Warren County	96 70
Washington County	162 60
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Total	\$10,890 30

EXHIBIT No. 8.

 VALUE OF GARDEN PRODUCTS RAISED DURING THE FISCAL
 YEAR ENDING SEPTEMBER 30, 1907.

447 bbls. beets	\$721 50
35 doz. bunches beets.....	10 50
173 bbls. onions	346 00
138 doz. bunches onions.....	13 80
60 bushels pickling onions.....	75 00
310 bushels dry onions.....	310 00
50 bushels onion sets.....	100 00
85 bbls. pie plant.....	170 00
65 doz. bunches pie plant.....	9 75
14 bbls. radishes	28 00
151 doz. bunches radishes.....	28 00
621 bbls. cabbage	541 25
12 bbls. squash	12 00
159 bbls. cantaloupes	318 00
101 bbls. kraut	704 50
3 1-3 bbls. sage	6 75
19 baskets cantaloupes	19 00
693 bushels beans	468 85
350 bushels lettuce	211 00
80 bushels greens	38 20
37 bushels peas	37 00
2,616 bushels tomatoes	1,225 50
25 bbls. carrots	43 50
300 doz. peppers	6 00
3439 doz. roasting ears, corn.....	282 65
1,347 doz. cucumbers	224 05
5,700 doz. pickles	11 40
58 doz. egg plant	43 50
150 doz. bunches celery.....	52 50
14 doz. heads cauliflower.....	21 00
15 gals. Lima beans.....	11 25
1 gal. horseradish	60
3,256 pumpkins	65 12
294 bbls. parsnips	588 00

 Total

\$6,744 17

EXHIBIT No. 9.

REPORT OF SALES OF DISCARDED PROPERTY FOR THE FISCAL
YEAR ENDING SEPTEMBER 30, 1907.

<i>Date.</i>	<i>To Whom Sold.</i>	<i>Articles.</i>	<i>Amount.</i>
1906.			
Nov. 1.	D. H. Darnell.....	Slops for November, 1906.....	\$34 75
" 1.	Amelia Gordon	For making wrapper.....	1 00
" 1.	Wm. Robinson	5 old barrels.....	1 20
" 1.	Wm. Farley	1 old matting	25
" 5.	J. Howard	2 bushels refused corn.....	50
" 7.	H. Cohen	8 barrels, 2 kegs, old rubber.....	6 70
" 10.	A. Alt	1 old box	25
" 10.	J. Jones	1 old box	25
" 27.	C. Henneger	3 old boxes	75
" 27.	H. Cohen	5 old barrels and junk.....	6 35
" 27.	W. S. Johnson	338 old barrels.....	54 08
" 30.	H. Cohen	1,575 lbs. rags.....	26 00
" 30.	H. Cohen	2,465 lbs. bones	14 15
" 30.	H. Cohen	2,070 lbs. lead cable.....	144 90
" 30.	H. Cohen	5,150 lbs. old iron.....	25 75
" 30.	H. Cohen	1,200 lbs. old grease.....	30 00
Dec. 1.	D. H. Darnell.....	Slops for December, 1906.....	34 75
" 31.	D. H. Darnell	Slops for January, 1907.....	34 75
" 31.	E. M. Rife	207 small boxes.....	8 25
" 31.	W. O. Duncan	1 old farm wagon and laundry...	6 00
" 31.	Mrs. Eliz. J. Furniss	For making wrapper, etc.....	2 00
" 31.	Wm. Woesner	564 lbs. old grease.....	20 00
" 31.	P. Stephenson	5 old brooms	25
" 31.	H. Cohen	15 kegs, 8 barrels and junk.....	8 85
" 31.	Joe Bronson	1 old box	25
" 31.	Mrs. Hauze	3 old boxes	70
" 31.	Joe Jackson	1 barrel and 4 old R sheets.....	2 00
" 31.	John Davis	1 barrel and 2 boxes.....	1 10
" 31.	Wm. Johnson	1 box	25
" 31.	Mrs. Bates	2 boxes	35
" 31.	W. S. Johnson	195 old barrels.....	31 25
" 31.	H. Cohen	1,050 lbs. old rags.....	15 75
" 31.	H. Cohen	1,930 lbs. old bones.....	9 65
1907.			
Jan. 1.	The Sinker-Davis Co.....	1 old engine, scrap iron.....	46 50
" 1.	Wm. Woesner	564 lbs. grease.....	20 00
" 1.	D. H. Darnell	Slops for February, 1907.....	34 75
" 31.	W. S. Johnson	282 old barrels.....	45 06
" 31.	John Chew	1 old R. sheet and 3 old brooms..	40
" 31.	C. Ormson	4 old boxes	1 00
" 31.	H. Jackson	5 old brooms	25
" 31.	J. Jones	1 old broom	05
" 31.	Anna Garrett	75 lbs. old rags.....	60
" 31.	Joe Pierson	2 old rubber sheets.....	50
" 31.	Mrs. McTumer	Old rags	25
" 31.	A. R. Cates	Old linoleum	1 50
" 31.	Wm. Farley	1 old bag	15
" 31.	W. H. Davis	2 boxes	40
" 31.	H. Garrett	5 old brooms	25
" 31.	Miss Leach	Old rags	25
" 31.	Miss Chew	Old rags	35
" 31.	Wm. Carbaugh	Bottles, rubber and old iron.....	2 00

EXHIBIT No. 9—Continued.

<i>Date.</i>	<i>To Whom Sold.</i>	<i>Articles.</i>	<i>Amount.</i>
1907.			
Jan. 31.	H. Cohen	10 old barrels.....	\$3 60
" 31.	H. Cohen	2,225 lbs. bones	11 10
Feb. 28.	D. H. Darnell.....	Slops for March, 1907.....	34 75
" 28.	Wm. Woesner	1,255 lbs. old grease.....	44 50
" 28.	M. C. Hunt	15 sal soda kegs.....	1 80
" 28.	Mrs. E. J. Furniss.....	Making robe, skirt and gowns....	1 50
" 28.	Otto Henrie	50 old iron	50
" 28.	W. S. Johnson	349 barrels	55 80
" 28.	A. R. Caster	Old rubber and linoleum.....	2 10
" 28.	Miss Smith	Rags	70
" 28.	Mrs. Tolson	Rags	15
" 28.	Wm. Rasttime	14 old barrels	7 15
" 28.	Mrs. Garrett	Old rags	15
" 28.	Mrs. Chew	Old rags	45
" 28.	Mrs. Bales	Old rags	20
" 28.	Sam Smith	Old brooms	15
" 28.	Joe Branson	1 bucket	10
" 28.	J. Jones	1 rubber sheet	10
" 28.	H. Cohen	4 old barrels, 2 kegs.....	1 30
" 28.	A. Greeson	6 boxes	2 50
" 28.	Wm. Carbaugh	6 barrels and old rubber	2 50
" 28.	H. Cohen	3 barrels and old rags	4 95
" 28.	H. Cohen	2,115 pounds rags	31 72
" 28.	H. Cohen	3026 pounds old iron	12 08
" 28.	H. Cohen	1,800 pounds bones	9 00
Mar. 31.	D. H. Darnell	Slops for April, 1907.....	34 75
" 31.	Wm. Woesner	564 pounds grease	20 00
" 31.	J. Howard	7 bushels refused corn	1 90
" 31.	Mrs. Smith	Old rags	30
" 31.	H. Cohen	3 barrels, 1 keg and old iron	2 25
" 31.	Wm. Carbaugh	Old metal	75
" 31.	Wm. Rostine	4 barrels and metal	3 40
" 31.	David Hoytz	4 barrels and 1 keg	3 70
" 31.	C. D. Davis	4 boxes	1 00
" 31.	L. Suck	4 boxes	1 00
" 31.	W. McNealey	4 old buckets	40
" 31.	D. Hoytz	4 kegs and metal	1 90
" 31.	L. Suck	5 old rubber sheets	1 00
" 31.	Mrs. Garrett	Rags	25
" 31.	W. S. Johnson	307 old barrels	49 74
" 31.	H. Cohen	1,145 pounds bones	5 73
" 31.	H. Cohen	825 pounds rags	12 37
" 31.	H. Cohen	275 pounds lead cable	19 25
" 31.	H. Cohen	180 pounds tea lead	6 30
" 31.	H. Cohen	5 pounds tinfoil	75
Apr. 30.	W. S. Johnson	233 barrels	37 24
" 30.	D. H. Darnell	Slops for May, 1907	34 75
" 30.	Joseph Haas	1,655 pounds grease	45 00
" 30.	H. Cohen	1,900 pounds bones	9 50
" 30.	H. Cohen	875 pounds rags	13 15
" 30.	H. Cohen	25 pounds metal and rags	7 00
" 30.	Wm. Carbaugh	10 pounds metal	2 15
" 30.	O. Davis	2 boxes	50
" 30.	Mrs. Falson	20 pounds rags	45
" 30.	D. Hoytz	4 barrels	2 40
" 30.	D. Hoytz	Metal and rubber	70
" 30.	Mrs. Falson	50 pounds old rags	1 10
" 30.	J. White	5 barrels	3 00

EXHIBIT No. 9—Continued.

<i>Date.</i>	<i>To Whom Sold.</i>	<i>Articles.</i>	<i>Amount.</i>
1907.			
May 31.	D. H. Darnell	Slops for June, 1907.....	\$34 75
" 31.	H. Cohen	810 pounds grease	29 16
" 31.	Nor. Ohio Metal Refining Co... 3,200 old lamps		16 00
" 31.	Barbara Hanson	Making two dresses	1 00
" 31.	C. E. Gregory	400 small boxes	8 00
" 31.	M. C. Hunt	30 sal soda kegs	3 00
" 31.	W. S. Johnson	351 barrels	56 04
" 31.	Mrs. Williams	Old rags	10
" 31.	Mrs. McCade	Old rags	40
" 31.	L. M. Hudson	1 old lawn mower	1 50
" 31.	Mrs. Barker	Old rags	25
" 31.	Wm. Carbaugh	Old rubber and metal	2 00
" 31.	J. Perish	Refused corn	3 00
" 31.	Wm. Miench	1 barrel refused corn	75
" 31.	David Hoytz	6 barrels	2 75
" 31.	Miss McCabe	Rags	15
" 31.	Joe Branson	1 old can	10
" 31.	D. Hoytz	200 old boxes	6 00
" 31.	Wm. Carbaugh	Old metal	1 10
" 31.	R. S. Camplin	2 berry crates	15
" 31.	D. Hoytz	250 boxes and barrels	10 55
" 31.	Mrs. Painter	2 old buckets	20
" 31.	Frank Zinmiller	7 old sheets	1 25
" 31.	H. Cohen....	barrels, boxes and brass	3 00
" 31.	Miss Bakes	Old rags	1 15
" 31.	Beckie Bird	Old rags	50
" 31.	H. Duncan	3 old desks and 3 old sheets	1 25
" 31.	H. Cohen	1,075 pounds rags	16 10
" 31.	H. Cohen	2,000 pounds bones	10 00
June 29.	D. H. Darnell	Slops for July, 1907.....	34 75
" 29.	M. C. Hunt	32 sal soda kegs	3 20
" 29.	W. S. Johnson	256 barrels	40 96
" 29.	D. Hoytz	100 boxes	3 00
" 29.	H. Cohen	Files and rags	4 00
" 29.	V. Morris	Old files	1 50
" 29.	L. M. Hudson	Old rags	1 50
" 29.	F. Coach	10 boxes	2 00
" 29.	L. M. Hudson	1 door	50
" 29.	D. Hoytz	3 kegs and 1 barrel	1 00
" 29.	C. Bryant	Old rubber	30
" 29.	D. Hoytz	3 barrels and 100 boxes	4 75
" 29.	W. Tharf	Old sacks	65
" 29.	H. Cohen	5 barrels	1 50
" 29.	Beckie Bird	Rags	25
" 29.	Mrs. Smith	Rags	15
" 29.	Joe Branson	Refused corn	75
" 29.	D. Hoytz	2 barrels	75
" 29.	Wm. Rostine	2 kegs	55
" 29.	Wm. Rostine	Metal	1 20
" 29.	H. Cohen	1,000 pounds grease	36 00
" 29.	H. Cohen	1,700 pounds bones	8 50
" 29.	H. Cohen	1,170 pounds rags	17 50
July 31.	D. H. Darnell	Slops for August, 1907	34 75
" 31.	W. S. Johnson	226 barrels	36 16
" 31.	H. Cohen	575 barrels grease	20 70
" 31.	H. Cohen	2,000 pounds bones	10 00
" 31.	H. Cohen	1,180 pounds rags	17 70
" 31.	D. Hoytz	100 old boxes	3 00

EXHIBIT No. 9—Continued.

Date.	To Whom Sold.	Articles.	Amount.
1907.			
July 31.	John Demfru	1 old barrel.....	\$1 00
" 31.	Wm. Carter	Old iron	1 00
" 31.	H. Cohen	Rags	2 50
" 31.	W. Tharf	Old sacks	1 00
" 31.	Mrs. Smith	Rags	10
" 31.	Mrs. Barkess	Rags	25
" 31.	Mrs. Bird	Rags	35
" 31.	D. Hoytz	Old kegs, iron, etc.....	1 80
" 31.	D. Hoytz	215 boxes, 2 barrels, scrap	8 25
" 31.	D. Hoytz	2 barrels scrap	1 40
" 31.	Wm. Carter	Old iron and rubber	85
" 31.	Mrs. McGabe	Rags	50
" 31.	D. Hoytz	2 old barrels and 100 boxes	4 20
Aug. 31.	D. H. Darnell	Slops for September, 1907.....	34 75
" 31.	M. C. Hunt	34 sal soda kegs	3 40
" 31.	Ross Gates	Old rubber	35
" 31.	D. Hoytz	2 old barrels	75
" 31.	B. Bird	Old rags	25
" 31.	Wm. Minch	1 barrel corn	75
" 31.	D. Hoytz	Old metal	30
" 31.	John Chew	Old rags	25
" 31.	Bechie Bird	Old rags	35
" 31.	Joe Funk	1 barrel refused corn	75
" 31.	Wm. Farley	1 old mattress	50
" 31.	R. Gates	Old linoleum	50
" 31.	Mrs. Barkler	Rags	40
" 31.	H. Cohen	Rags	2 00
" 31.	H. Cohen	2,000 pounds bones	10 00
" 31.	H. Cohen	500 pounds grease	18 00
" 31.	H. Cohen	875 pounds rags	13 00
" 31.	W. S. Johnson	366 old barrels	58 52
Sept. 30.	W. S. Johnson	339 old barrels	54 25
" 30.	D. Hoytz	55 kegs	1 65
" 30.	Mrs. Baehles	Rags	50
" 30.	H. Cohen	1,100 pounds rags	16 50
" 30.	H. Cohen	1,725 pounds bones	8 62
" 30.	H. Cohen	250 pounds grease	9 00
" 30.	H. Cohen	8,000 pounds old iron	25 00
" 30.	D. Hoytz	2 barrels, 1 keg, 1 box	1 80
" 30.	J. Jones	1 old broom	10
" 30.	Mrs. Jones	Rags	20
" 30.	D. Hoytz	1 barrel	40
" 30.	H. Cohen	Iron	1 75
" 30.	Joe Branson	1 barrel refused corn	75
" 30.	Wm. Farley	2 old rugs	50
" 30.	D. Hoytz	Metal and 2 barrels	2 20
" 30.	Dennis Connor	1 barrel and sheets	1 15
" 30.	D. Hoytz	88 boxes, 1 barrel	3 03
" 30.	Frank Pierce	1 box	25

Total sales for eleven months ending September 30, 1907..... \$2,022 76

EXHIBIT No. 10.

INVENTORY, SEPTEMBER 30, 1907.

DEPARTMENT.	Apparatus, Plant.	Equipment, Tools, etc.	Stock, Material, Books.	Total.
Housekeeper, department for women.....		\$7,000 65		\$7,000 65
Housekeeper, department for men.....		4,704 40		4,704 40
Housekeeper, storehouse.....		1,281 20		1,281 20
Ward property, department for men.....		25,604 87		25,604 87
Ward property, department for women.....		30,486 64		30,486 64
Dining department.....		2,565 35	\$128 00	2,693 35
General kitchen, department for men.....		3,551 10	840 00	4,391 10
General kitchen, department for women.....		4,960 50	1,145 80	6,106 30
Store.....		143 50	5,629 30	5,772 80
Bakery.....		1,020 60	151 79	1,172 39
Butcher shop.....		82 25	125 23	207 48
Upholster shop.....		196 15	2,005 18	2,201 33
Tin shop.....		617 15	432 75	1,049 90
Barber shop and club room.....		241 70		421 70
Laundry.....	\$11,000 00	994 45	83 50	12,077 95
Clothing department.....		372 35	6,309 09	6,681 44
Engineer department.....		4,881 46	1,857 77	
Stirling boilers.....	90,000 00			
Plumbing and pipe lines to department for men, \$17,170.00; to department for women, \$22,195.00; to pathological department and other buildings, \$13,870.00.....	53,235 00			
Plumbing and heating plant, sick hospital.....	12,948 00			
Ice plant and cold storage.....	6,335 00			169,257 23
Electrical department.....		427 70	612 10	
Electric light plant, wires, etc.....	35,000 00			
Fire alarm system.....	240 00			
Domestic telephone system.....	2,258 54			38,538 34
Carpenter department.....		1,733 05	8,848 85	10,581 90
Paint shop.....		33 00	291 00	324 00
Plaster shop.....		8 00	23 00	31 00
Fire department.....		5,599 00		5,599 00
Police department.....		60 05		60 05
Officers' barn.....		2,961 35	45 70	3,007 05
Chapel, porter's department.....		655 55		655 55
Farm and garden.....		1,606 95	435 70	2,042 65
Florist's department.....		1,865 40	4,712 06	6,577 46
General library, 2,376 volumes.....			1,760 00	1,760 00
Drug department.....		501 00	1,140 20	1,641 20
Surgical instruments.....		285 65		285 65
Pathological department and scientific library, 847 vol- umes.....		5,555 10	3,032 23	8,587 33
Hospital for sick insane.....		11,404 51	89 39	11,493 90
Total.....	\$211,016 54	\$121,400 63	\$39,698 64	\$372,115 81

EIGHTEENTH ANNUAL REPORT

Of the Board of Trustees and
Medical Superintendent
of the

Eastern Indiana Hospital for the Insane

AT

EASTHAVEN, NEAR RICHMOND

FOR THE

Fiscal Year Ending September 30, 1907

To the Governor

INDIANAPOLIS :

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.
1907.

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
November 28, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, December 3, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

DECEMBER 3, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, December 3, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer December 3, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

EASTERN INDIANA HOSPITAL FOR THE INSANE.

1907.

BOARD OF TRUSTEES.

JOHN W. HANAN, Lagrange.....	President
JOHN DETAMORE, Portland.....	Vice-President
JOSEPH L. COWING, Rushville.....	Treasurer
EDWARD BARRETT, Plainfield.....	Secretary

OFFICERS.

SAMUEL E. SMITH, M. S., M. D., MEDICAL SUPERINTENDENT.

PAUL S. JOHNSON, M. D.....	Senior Assistant Physician
KENNETH I. JEFFRIES, M. D.....	Junior Assistant Physician
MARY WICKENS, M. D.....	Medical Interne
LARUE D. CARTER, M. D.....	Medical Interne
JOHN P. THISTLEWAITE.....	Steward
BRADFORD HARRISON	Storekeeper
HARRY T. BEST.....	Apothecary
MINNIE YOUNG.....	Secretary

BOARD OF TRUSTEES' REPORT.

HON. J. FRANK HANLY, *Governor of Indiana*:

Sir—Obedient to the statute, the Board of Trustees of the Eastern Indiana Hospital for the Insane respectfully submits the following report for the fiscal year of eleven months, ending September 30, 1907:

At the beginning of the year the members of the Board were Carroll K. McCullough, John Detamore and Joseph L. Cowing. Mr. McCullough resigned early in November, 1906, to represent his county in the legislature of 1907, and the vacancy thus created was filled by your appointment of John W. Hanan, of Lagrange, for the unexpired term, ending January 1, 1908. The term of office of John Detamore expired January 1, 1907, and he was appointed by you to succeed himself for a term of three years ending January 1, 1910.

By the operation of an act of the legislature of 1907, approved March 21, 1907, the Board was made to consist of four instead of three members, as heretofore, and the new office thus created was filled by your appointment of Edward Barrett, of Plainfield, for a term of four years, ending May 6, 1911.

Then on May 14, 1907, the Board was reorganized, and so continues to this date, as follows:

John W. Hanan.....	President
John Detamore.....	Vice-President
Edward Barrett.....	Secretary
Joseph L. Cowing.....	Treasurer

FINANCES.

While the regular funds for maintenance, repairs and clothing permitted us to carry on the work of the Hospital and close the year without any indebtedness, they were insufficient for the institution's best interests. The clothing fund alone was ample, and those for both maintenance and

repairs were so limited, on account of the extraordinary and unforeseen rise in the cost of supplies and labor, that a deficit was avoided only by the exercise of the strictest economy in all expenditures. The household equipment, in consequence, has suffered some loss which could not be regained, and the inability to increase wages in some departments has occasionally disturbed the organization. The repairs have been kept up fairly well and no loss to the permanent improvements has been sustained, but it is apparent the repair fund is inadequate. It is our unanimous opinion that the maintenance and repair funds must be substantially increased at the earliest opportunity, otherwise the established standard of maintenance and preservation of the permanent improvements can not be maintained. It is possible to sacrifice in a few directions for a year or two without serious loss, but the policy can not continue in operation longer without permanent detriment to the service and rapid deterioration of the property.

The legislature of 1907 appropriated for the third time \$2,500, available April 1, 1907, for the specific purpose of a railway crossing. This improvement was under consideration during the past four years, and all efforts to reach an understanding with the officers of the railway company were futile, and nothing could be accomplished until the last legislature clothed the Board with authority to exercise the right of eminent domain for the convenience of the institution. With this authority, a grade crossing has been secured and the necessary improvements through the right of way have been made at a cost of \$1,279.92. The connecting driveway and walks are now in progress of construction and will be completed before the advent of the winter season.

The unusual stress for the admission of patients and the overcrowded condition of the institution led the management to take steps to anticipate the availability of the specific appropriation of \$60,000, in effect October 1, 1907, provided by the last legislature, for two cottages and appurtenances, by having plans prepared and giving consid-

eration to bids for the work of construction at the July meeting. It was found, on opening the sealed proposals, that the lowest was about \$4,500 in excess of the estimates, making impossible, therefore, both the construction and equipment of the structures as contemplated. With your approval, after the Attorney-General had advised us that such action would be within the law, the Board entered into a contract with Louck & Hill Co. for \$54,260 for the construction of the cottages and appurtenances, and also certain other contracts for plumbing, steam heating, and electrical supplies for installation by the institution's engineer's corps, which consumed the balance of the appropriation, leaving the question of equipment an open one for future consideration and action. The work was begun promptly, and by the end of the year the brick work of Cottage 14 was under way and the foundation of Cottage M was nearing completion. It is the expectation to enclose these structures before winter, and at once install the heating apparatus, that the interior work may proceed regardless of weather conditions.

In the same manner a contract was entered into for alterations of the steam heating plant, as authorized by the last legislature in a specific appropriation of \$5,000. The purpose is to convert the gravity system, which has been in service for eighteen years, into a Warren Webster vacuum system, in the expectation of reducing the cost of maintenance and improving the service. This work was started before the end of the year.

Other specific appropriations were made by the legislature of 1907, but are not available until the beginning of the ensuing fiscal year and have not been anticipated.

The fiscal exhibits in the appended report of the Medical Superintendent set forth fully the receipts and disbursements, and are summarized, as follows:

FISCAL YEAR 1906-1907 (ELEVEN MONTHS).

Drawn from State Treasury.....		\$119,502 33
Disbursed for maintenance	\$109,527 61	
Disbursed for repairs	5,497 17	
Disbursed for clothing	3,197 63	
Disbursed for railway crossing.....	1,279 92	
	<hr/>	<hr/>
Total	\$119,502 33	\$119,502 33
Maintenance—		
Appropriation for 700 patients for eleven months		\$106,333 33
Appropriation for 30+ patients at \$146.66....		4,424 86
Disbursements, Exhibits 2 and 3.....	\$109,527 61	
Covered into general fund.....	1,230 58	
	<hr/>	<hr/>
Total	\$110,758 19	\$110,758 19
Repairs—		
Appropriation for eleven months.....		\$5,500 00
Disbursements, Exhibits 4 and 5.....	\$5,497 17	
Covered into general fund.....	2 83	
	<hr/>	<hr/>
Total	\$5,500 00	\$5,500 00
Clothing—		
Appropriation for eleven months.....		\$4,583 34
Disbursements, Exhibits 6 and 7.....	\$3,197 63	
Covered into general fund.....	1,385 71	
	<hr/>	<hr/>
Total	\$4,583 34	\$4,583 34
Specific Fund—Railway Crossing—		
Appropriation available April 1, 1907.....		\$2,500 00
Disbursements, Exhibit 8.....	\$1,279 92	
Balance in treasury.....	1,220 08	
	<hr/>	<hr/>
Total	\$2,500 00	\$2,500 00
Earnings—		
Receipts from sales, Exhibit 9.....		\$256 32
Covered into general fund.....	\$256 32	
	<hr/>	<hr/>
Total	\$256 32	\$256 32
Cost per capita of maintenance for eleven months.....		\$150 00
Cost per capita of repairs for eleven months.....		7 52
Cost per capita for clothing for eleven months.....		4 37
		<hr/>
Total cost per capita for eleven months.....		\$161 89

The inventory of September 30, 1907, shows a valuation of real and personal property amounting to \$849,419.15.

GENERAL.

The enrollment of patients November 1, 1906, was 751; admitted during the year, 117; discharged, 61; died, 55; enrolled September 30, 1907, 752; and present September 30, 1907, 736.

The institution has been unable to meet the demands made upon it for room, notwithstanding the special effort to furlough and discharge patients at the earliest moment possible. The department for men has been particularly overcrowded and the waiting list for this department has grown steadily. The management has been unable, in the absence of legislative authority and necessary funds, to relieve the situation. It has, however, in view of the existing stress in the district, as elsewhere stated in this report, anticipated as much as possible the specific appropriation available for the ensuing year for two additional cottages by making contracts and starting the work of construction two months before any of the funds can be drawn. These should be completed by the middle of the year, and then some much-needed relief will be afforded the district.

Aside from the anxieties and limitations arising from an insufficient maintenance fund and the lack of accommodations for additional patients, the year has been a successful and comfortable one. We believe the most has been accomplished by the resources at our disposal and the service of the Hospital has been good in every particular.

Respectfully submitted,

JOSEPH L. COWING,
J. W. HANAN,
EDWARD BARRETT,
J. DETAMORE,
Board of Trustees.

Easthaven, November 12, 1907.

MEDICAL SUPERINTENDENT'S REPORT.

To the Board of Trustees:

I beg leave to submit the following report of the Hospital for the fiscal year, of eleven months, ending September 30, 1907:

MOVEMENT OF PATIENTS.

FISCAL YEAR 1906-1907.

	Men.	Women.	Total.
Enrolled October 31, 1906.....	359	392	751
Admitted during year.....	49	68	117
Discharged	23	38	61
Recovered	11	19	30
Improved	9	17	26
Unimproved	3	2	5
Died	22	33	55
Enrolled September 30, 1907.....	363	389	752
Average number, present.....	351.195	378.975	730.170
Average number, enrolled.....	361.235	392.521	753.756

MEDICAL HISTORY.

Since the opening of the Hospital, August 1, 1890, 2,559 patients have been admitted, of whom 1,297 were men and 1,262 were women. Of this number 568 were discharged recovered, 404 improved, 58 unimproved, 11 idiotic, 16 not insane, 30 were transferred to other hospitals, and 690 died while under treatment.

The whole number under treatment during the year was 868—408 men and 460 women.

Admissions. During the year there were 117 admissions—49 men and 68 women. Of these 55 were classified as presumably curable, and 62 as incurable. Of the curable conditions 21, or 38 per cent., were cases of melancholia in acute forms; 33, or 60 per cent., were cases of mania in acute forms; and one was a case of toxic insanity. Of the incurable conditions, 35 were cases of chronic mania, 8

chronic dementia, 8 organic dementia, 10 general paresis, and one paranoia.

Of the presumably curable cases admitted 11, or 20 per cent., were recurrent in character, of whom 8 were second admissions and 3 were third admissions.

The ages of the 117 admitted were classified as follows: Three were under 20 years, 21 between 20 and 30 years, 32 between 30 and 40 years, 29 between 40 and 50 years, 25 between 50 and 60 years, 3 between 60 and 70 years, and 2 were over 70 years of age.

The duration of disease was three months or less in 31 cases, six months in 11 cases, nine months in 3 cases, one year in 26 cases, two years in 20 cases, three years in 11 cases, and five years and over in 15 cases.

Only seven of the admissions were foreign born.

Discharged Cases. There were discharged during the year 23 men and 38 women—total 61. Of these 30 were recovered, 26 improved and 5 unimproved. The number recovered was 25.4 per cent. of the number of admissions for the year, 24 per cent. of the whole number of presumably curable cases under treatment, and 54.5 per cent. of the number of presumably curable cases admitted during the year.

The psychoses of those recovered were melancholia in 11 cases, acute mania in 14 cases, toxic insanity in 2 cases, chronic mania in 2 cases, and recurrent mania in 1 case.

The approximate ages of those recovered were as follows: Two were under 20 years, 8 between 20 and 30 years, 6 between 30 and 40 years, 9 between 40 and 50 years, 5 between 50 and 60 years, and one over 60 years.

There were discharged improved 9 men and 17 women—total 26; unimproved, 3 men and 2 women—total 5.

Mortality Record. The number of deaths was 55—22 men and 33 women, or 6.3 per cent. of the whole number under treatment. Of the 55 deaths 10, or 18 per cent., were cases of general paresis, and 11, or 20 per cent., were due to tuberculosis.

ACCOMMODATIONS.

The story of the overcrowding of the institution with a long list of applicants awaiting admission is an old and oft-repeated one in these reports, and it still holds true. The list of suspended cases and the number of insane persons confined for safety in the county jail grow from year to year, and touching appeals by distressed relatives and friends for the admission of one or more urgent cases are daily incidents and a source of no little embarrassment to the management, helpless as it is to increase the accommodations to meet the requirements of the district. Gladly, and preferably for the good of the patients and the work of the Hospital, would a prompt acceptance for the admission of every deserving applicant be issued, were accommodations available, but the normal limits were long since passed, and for more than two years the daily average number actually present has exceeded the normal capacity some eighteen or twenty patients; the reserved accommodations in the hospitals have been utilized, and right of furlough and discharge exercised to the fullest extent, and occasionally, in some very doubtful instances, with the result that there is no more elasticity to the capacity, and a new case, particularly in the department for men, can be received only when a vacancy occurs by reason of death, furlough or discharge.

Happily for this distressing situation there is some relief in sight. Two cottages authorized by the legislature are being pushed towards completion with all rapidity, in the expectation that within a few months seventy or more beds will be added to the equipment and as many patients promptly admitted.

Within the year 190 applications were received, of which 117 were admitted, 61 were suspended for want of room, 4 were rejected and 8 were withdrawn.

FINANCES.

Under an act of the legislature of 1907, approved March 9, 1907, this fiscal year ended September 30, instead of October 31, as heretofore, and therefore includes only

eleven months. By the provisions of the same act all the regular appropriations for the current year were reduced one-twelfth, and the available appropriations were as follows:

Maintenance, 700 patients, for eleven months.....	\$106,333 33
Maintenance, 30+ patients at \$146.66.....	4,424 86
Total maintenance fund.....	\$110,758 19
Repairs for eleven months.....	5,500 00
Clothing for eleven months.....	4,583 34
Specific fund for railway crossing.....	2,500 00
Total funds available.....	\$123,341 53

The total disbursements for all purposes were \$119,-502.33, as are shown in Exhibits 2, 4, 6 and 8, and are classified as follows:

Subsistence	\$33,963 40
Trustees' and officers' salaries.....	10,223 24
Attendants' wages	19,025 52
Employees' wages	13,312 42
Fuel, light and other expenditures.....	31,003 03
Repairs	5,497 17
Clothing	3,197 63
Railway crossing	1,279 92

Unexpended balances in the regular funds amounting to \$2,619.12 were covered into the general fund of the State treasury; and a balance of \$1,220.08 in the specific fund for the railway crossing continues available during the ensuing fiscal year.

Cost per capita of maintenance for eleven months.....	\$150 00
Cost per capita of repairs for eleven months.....	7 52
Cost per capita of clothing for eleven months.....	4 37

Total cost per capita for eleven months.....\$161 89

The receipts from all sources other than appropriations, amounted to \$256.32, Exhibit 9, and this sum was paid into the general fund of the State treasury and reported semi-annually to the Governor.

The summary of the inventory of September 30, 1907, appears as Exhibit 10.

The regular appropriations, with the exception of the clothing fund, were insufficient for the needs of the institution. The increase in the cost of subsistence supplies and labor could not be met by funds fixed two years ago by a much lower standard of cost. This condition has embarrassed the management, particularly during the past six months, notwithstanding expenses have been curtailed wherever possible and sacrifices made in many directions. Unfortunately, there is little relief in sight for the ensuing year, as the appropriation for maintenance is based upon the standard of cost established four years ago, is fixed, and can not be changed to meet the new conditions. It is my judgment it is better to create a deficit at the end of the ensuing fiscal year, and thereby mar a long financial record, a source of no little pride to the management, rather than suffer a sacrifice in the standard of care. I am sensible of the grave import of this recommendation and claim that the result will touch the pride of no one more than myself, yet these patients must be properly maintained and the property interests of the institution preserved and protected.

The maintenance fund, limited as it was, permitted no additions to the general equipment. In fact, it has not been kept up as usual in every item.

The repair fund available was \$5,500.00 and the total expenditures were \$5,497.17, leaving a balance of \$2.83, which was covered into the general fund of the State treasury. See Exhibit 4.

The expenditures from this fund were \$1,195.92 for materials and \$4,301.25 for labor. The work done was almost entirely in the nature of current minor repairs. Three painters were engaged throughout the year and during the winter season their attention was given to such inside work as the painting of the walls in the rear center building and in certain cottages, the varnishing of woodwork and furniture and the painting of exposed heating and other iron work. During the past summer all the window frames and sash, with the exception of two buildings only,

were painted. The materials for this work cost \$623.42 and the labor \$1,776.57.

The annual inspection and repairs of the roofs, including the tin and galvanized iron work, were made at a cost of \$420.00.

Two and part of the time three carpenters were engaged in the repairs to buildings. The demands in this direction are increasing as the structures become older, but constant attention has kept them in good condition. The expenditures from this fund for this class of repairs have amounted to \$2,154.97 during the year.

The repair fund for the ensuing year is \$7,500, which will permit the employment of some additional labor.

The clothing fund available for the year was \$4,583.34, and the disbursements from it amounted to \$3,197.63. The balance of \$1,385.71 was returned to the general fund of the State treasury. This fund is sufficient for the present needs.

Railway Crossing. The specific appropriation of \$2,500 for a railway crossing was provided for the third time by the legislature of 1907, and made available April, 1907. The same legislature enacted a law which gave the board of trustees of the various state institutions the power to exercise the right of eminent domain by the condemnation of property for the necessity or convenience of the public institutions. This authority enabled the management to solve the problem of a railway crossing, much needed by this Hospital for a public entrance, but denied it by the policy and particularly the attitude of opposition of certain officials of the P., C., C. & St. L. Railway Company during the previous four years. Proceedings in condemnation under the statute were instituted on the advice of the Attorney-General, when the railway company suggested a settlement by agreement, which resulted in the payment to the railway company of fifty dollars in the nature of damages for a right of way through its property. The cost of the legal proceedings and attorney's fees amounted to \$133.10. The crossing was then constructed by contract

at a cost of \$1,116.82, including four large ornamental concrete posts located at the entrance to the Hospital property. The balance in this fund of \$1,220.08 will be applied for the construction of the driveway and cement walk on the grounds.

Cottages "M" and "14." The last legislature appropriated the sum of \$60,000 for two cottages and appurtenances and made it available October 1, 1907. In view of the urgent need of these cottages and the fact that the work was limited to one building season, as the appropriation was made, it was deemed prudent, with the knowledge and consent of the Governor, to anticipate this fund by entering into a contract for the construction of the cottages and to begin the work during the summer of 1907, on deferred payments, due October 15 of the same year. Accordingly, plans and specifications were prepared and bids solicited. On opening the bids it was found that the lowest proposal exceeded the estimates about \$4,500, which made impossible both the construction and equipment of the cottages within the fixed appropriation.

After a conference with the Governor and Attorney-General, a decision was reached to proceed with the construction of the buildings and leave the question of equipment to the future. A contract was then made with the Louck & Hill Co. for the buildings for the sum of \$54,260. The steam heating, plumbing and electric work were not included in this contract and will be installed by the regular force of mechanics.

This work was begun late in the summer and at the end of the fiscal year Cottage 14 was ready for the brickwork and the foundation of Cottage M was nearing completion.

Steam Heating. A specific appropriation of \$5,000, available October 1, 1907, for improvements of the steam heating system was likewise anticipated by contracts, the purchase of materials and some work. A careful inquiry into the various heating systems led to a contract with the American Engineering Specialty Company for a Warren Webster system to replace the old gravity system which

has been in service during the past eighteen years. The work of changing the apparatus is well under way and will be completed before the end of this autumn.

The improvements contemplated by other specific appropriations available at the close of this fiscal year have not been started.

FARM AND GARDEN.

The past year has been fairly satisfactory, although the unfavorable weather, and particularly the late spring, were not conducive to the largest returns from the gardens. The products from both the farm and garden were valued at \$12,398.10 and the expenditures were \$5,311.56. The hay crop, excepting the alfalfa, was poor, and made necessary the purchase of the coming year's supply of timothy on the market, thereby considerably increasing the expenditures for the farm. The alfalfa and corn were good. The early gardens yielded less than the average quantity of products, while those of midsummer and early autumn were abundant.

The grade of cattle in the dairy has been improved during the year and now consists of twenty-nine cows, nine heifers and one bull, chiefly Holstein-Friesian stock. The yield of milk for the year was 176,967 pounds.

The piggery is now stocked with 181 hogs and pigs, and furnished 25,097 pounds of dressed pork, from which were made 8,600 pounds of lard, or three-fourths of the year's requirement.

A complete list of the farm and garden products appears as Exhibit 13.

ORGANIZATION.

The medical staff shows two changes in its organization during the year. Dr. M. Jennie Jenkins, woman physician, with a record of excellent service to her credit, resigned her position June 15, 1907, and the vacancy was filled by the appointment of Dr. Mary Wickens. Dr. J. S. Judah, medical interne in the department for men, after two years of acceptable work, resigned May 19, 1907, and he was succeeded by Dr. Larue D. Carter. Otherwise, the official

staff continues as heretofore. Many have been the changes, however, among the nurses, attendants and employes, due chiefly to the extraordinary demands for labor in all lines of business everywhere. These changes of necessity disturbed the organization and in some degree interfered temporarily with the progress of the work in some departments, yet in the main the service has been well maintained.

To the officers, heads of departments, attendants and employes who have contributed by faithful and efficient service to the success of the year's work, I tender my grateful appreciation.

In conclusion, I thank you for many courtesies, and for the assistance and encouragement you have tendered me in my efforts to discharge the many duties assigned me.

Respectfully submitted,

S. E. SMITH,
Medical Superintendent.

Easthaven, November 12, 1907.

MEDICAL TABLES

WITH

Medical Superintendent's Report.

TABLE I.

Movement of Patients from August 1, 1890, to September 30, 1907.

	Men.	Women.	Total.
Whole number admitted.....	1,297	1,262	2,559
Discharged.....	532	555	1,087
Recovered.....	286	312	598
Improved.....	198	206	404
Unimproved.....	30	28	58
Idiotic.....	4	7	11
Not insane.....	14	2	16
Transferred to other hospitals.....	17	13	30
Died.....	385	305	690
Remaining September 30, 1907.....	363	389	752

TABLE II.

Admissions and Discharges for Twelve Years, November 1, 1895, to September 30, 1907.

	Admitted During Year.			Present November 1, 1895, and Admitted to September 30, 1907.			Discharges During Year.												Whole Number of Discharges Since November 1, 1895.																							
	Men.		Total.	Men.		Total.	Recovered.			Improved.			Unimproved.			Not Insane.			Total.			Died.			Recovered.			Improved.			Unimproved.			Not Insane.			Total.			Died.		
	Men.	Women.		Men.	Women.		Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.						
In sane condition—																																										
First admission.....	43	52	95	808	787	1595	9	14	23	5	11	16	2	1	3	16	26	42	20	26	46	149	176	225	117	155	272	17	19	36	5	..	5	288	320	608	254	190	444
Second admission.....	5	10	15	149	194	343	3	3	1	3	4	1	1	1	1	1	1	1	2	6	8	2	4	6	15	32	47	24	39	63	6	3	9	1	1	1	46	74	120	33	41	74
Third admission.....	..	5	5	..	37	43	80	2	2	1	1	1	1	1	1	1	1	1	4	7	11	11	10	21	4	7	11	11	10	21	1	1	2	16	18	34	7	6	13
Fourth admission.....	..	1	1	13	23	36	..	..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	7	7	14	..	..	..	8	8	16	2	5	7				
Total.....	48	68	116	1007	1047	2054	9	19	28	7	15	22	3	2	5	19	36	55	22	33	55	169	216	285	159	211	370	24	23	47	6	..	6	358	420	778	296	242	538
Toxic condition—																																										
Alcohol habit.....	1	..	1	35	2	37	2	2	2	2	2	2	4	..	4	21	1	22	2	..	2	23	1	24	2	1	3		
Opium habit.....	13	14	27	2	2	10	5	15	2	6	8	12	11	23	1	..	1	
Cocaine habit.....	1
Chloral habit.....
Total.....	1	..	1	48	17	65	2	2	2	2	2	4	4	2	6	31	6	37	4	6	10	35	12	47	3	1	4	

TABLE III.

Results of Treatment in Presumably Curable Cases, Fiscal Year 1906-1907.

	Present at Beginning of Year.		Admitted During Year.		Transferred from Other Groups.		Under Treatment During Year.		Discharged, Recovered During Year.		Discharged, Improved During Year.		Average Length of Treatment of Recovered Cases (Last Attack).				Died During Year.		Average Duration of Insanity in Patients (Discontinued Attack).				Transferred to Other Groups.		Remaining at Close of Fiscal Year.	
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.		Women.		Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	
													Years.	Months.	Years.	Months.										Years.	Months.
Melancholia, Acute Forms—																										
First admissions.....	8	23	31	5	11	16	13	34	47	5	10	4	4	7	4	1	2	1	6	1	6	3	1	4	23	27
Second admission.....	7	7	14	1	2	3	1	9	10	1	1	..	..	..	..	..	1	1	..	..	..	..	1	1	6	7
Third admission.....	..	..	..	..	2	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	
Mania, Acute Forms—																										
First admission.....	8	15	23	10	17	27	18	32	50	3	11	1	2	4	9	4	4	5	..	5	3	1	4	11	18	29
Second admission.....	2	7	9	3	2	5	5	9	14	2	2	1	1	1	5	..	2	2	2	..	4	7	11	4	7	11
Third admission.....	..	..	..	..	1	1	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute Confusional Insanity—																										
First admission.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Second admission.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Third admission.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	18	52	70	19	35	54	37	87	124	8	17	25	2	5	7	1	6	7	..	..	6	3	9	20	56	76

TABLE V.

Results of Treatment in Curable Conditions for Twelve Years, November 1, 1895, to September 30, 1907.

	Whole Number of Cases Present Nov. 1, 1895, and Admitted to Sept. 30, 1907.			Whole Number of Cases Discharged Recovered.			Whole Number of Cases Discharged Improved and Unimproved.			Whole Number of Cases Died.			Discharged Recovered.						Whole Number of Cases Transferred to Other Groups.			Remaining.			Percentage of Recoveries on Whole Number Under Treatment.						Percentage of Deaths on Whole Number Under Treatment.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Men.	Women.	Total.	Men.	Women.	Total.	Of First Admis- sion.		Of Second Admis- sion.		Of Third Admis- sion.		Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

TABLE VI.
Movement of Population, Incurable Conditions, Fiscal Year 1906-1907.

	Present at Beginning of Year.			Admitted During Year.			Transferred from Other Groups.			Whole Number Under Treatment.			Transferred to Other Groups.			Discharged and Died.			Remaining.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Mania, chronic.....	123	146	269	12	23	35	6	2	8	141	171	312	1	...	1	8	14	22	132	157	289
Mania, recurrent.....	8	12	20	...	...	...	...	...	...	8	12	20	...	...	...	1	2	3	7	10	17
Dementia, chronic.....	127	125	252	4	4	8	...	...	...	131	129	260	...	...	...	6	15	21	125	114	239
Dementia, monomania.....	5	7	12	...	...	...	...	...	...	5	7	12	...	...	...	...	...	...	5	7	12
Dementia with paralysis.....	2	1	3	...	...	...	...	...	...	2	1	3	...	...	...	...	...	...	2	1	3
Dementia with locomotor ataxia.....	1	...	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	1	...	1
Organic dementia.....	5	1	6	5	3	8	1	...	1	11	4	15	...	...	...	5	3	8	6	1	7
Paretic dementia.....	12	6	18	8	2	10	1	1	2	21	9	30	...	...	...	8	3	11	13	6	19
Paranoia.....	28	19	47	1	1	2	...	...	...	28	20	48	1	...	1	1	2	3	26	18	44
Epileptic dementia.....	17	17	34	...	...	...	...	...	...	17	17	34	...	...	...	1	2	3	16	15	31
Total.....	328	334	662	29	33	62	8	3	11	365	370	735	2	...	2	30	41	71	333	329	662

TABLE VII.

Diagnosis of those Admitted, Fiscal Year 1906-1907.

DIAGNOSIS.	Men.	Women.	Total
Melancholia, simple	6	14	20
Melancholia, hypochondriacal.....		1	1
Mania, acute	13	20	33
Mania, chronic	12	23	35
Mania, recurrent.....			
Dementia, chronic	4	4	8
Paretic dementia	8	2	10
Organic dementia	5	3	8
Epileptic dementia.....			
Paranoia		1	1
Toxic insanity.....	1		1
Total.....	49	68	117

TABLE VIII.

Duration and Diagnosis of Those Recovered, Fiscal Year, 1906-1907.

DURATION.	Simple Melancholia.			Acute Mania.			Chronic Mania.			Toxic Insanity.			Recurrent Mania.			Hypochondriacal Melancholia.			Total.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Three months.....	1	2	3	2	6	8								1	1				3	9	12
Six months.....	2	2	4	1	3	4													3	5	8
Nine months.....																					
One year.....	2		2		1	1	1		1										3	1	4
Two years.....					1	1				1		1							1	1	2
Three years.....								1	1								1	1		2	2
Four years.....																					
Five years and over.....		1	1							1		1							1	1	2
Total.....	5	5	10	3	11	14	1	1	2	2		2		1	1		1	1	11	19	30

TABLE IX.

Duration of Admitted, Fiscal Year 1906-1907.

DURATION.	Men.	Women.	Total.
Three months.....	10	21	31
Six months.....	7	4	11
Nine months.....	2	1	3
One year.....	15	11	26
Two years.....	8	12	20
Three years.....	3	8	11
Five years and over.....	4	11	15
Total.....	49	68	117

TABLE X.

Approximate Ages Admitted, Fiscal Year 1906-1907.

AGES.	Men.	Women.	Total.
Under 20 years.....	3	2	5
Between 20 and 30 years.....	16	5	21
Between 30 and 40 years.....	10	22	32
Between 40 and 50 years.....	11	18	29
Between 50 and 60 years.....	9	16	25
Between 60 and 70 years.....		3	3
Over 70 years.....		2	2
Total.....	49	68	117

TABLE XI.

Approximate Ages of Recovered, Fiscal Year 1906-1907.

AGES.	Men.	Women.	Total.
Under 20 Years.....		1	1
Between 20 and 30 years.....	5	3	8
Between 30 and 40 years.....	1	5	6
Between 40 and 50 years.....	3	6	9
Between 50 and 60 years.....	2	3	5
Over 60 years.....		1	1
Total.....	11	19	30

TABLE XII.

Approximate Ages at Death, Fiscal Year 1906-1907.

AGES.	Men.	Women.	Total.
Between 20 and 30 years	1	1	2
Between 30 and 40 years	3	7	10
Between 40 and 50 years	4	8	12
Between 50 and 60 years	6	8	14
Between 60 and 70 years	6	3	9
Over 70 years	2	6	8
Total	22	33	55

TABLE XIII.

Occupations of Admitted, Fiscal Year 1906-1907.

Artist's wife	1	Laborers' wives	13
Barber	1	Machinists	2
Bartenders	2	Machinist's wife	1
Bartender's wife	1	Mechanic's wife	1
Butcher	1	Merchant's wife	1
Cabinetmaker's wife	1	Minister's wife	1
Car inspector	1	Missionary	1
Carpenter	1	Nurse	1
Carriage trimmer	1	Painter	1
Clerks	3	Painter's wife	1
Contractor's wife	1	Patternmaker's wife	1
Domestics	5	Physician's wife	1
Farmers	7	Printer's widow	1
Farmer's widow	1	Railroader's widow	1
Farmers' wives	8	Salesman's wife	1
Fireman	1	Saloonkeeper's widow	1
Flagman	1	Saloonkeeper's wife	1
Foremen's wives	2	Soldier's wife	1
Glassblower's wife	1	Stage-carpenter's wife	1
Glassworkers	4	Telegrapher's wife	1
Hostler's wife	1	Tinplate worker	1
Housekeepers	7	No occupation	4
Janitor	1	Unknown	1
Laborers	19	Total	117
Laborers' widows	5		

TABLE XIV.

Civil Condition of Admitted, Fiscal Year 1906-1907.

CIVIL CONDITION.	Men.	Women.	Total.
Single	29	14	43
Married	17	42	59
Widowed	3	10	13
Divorced		2	2
Total	49	68	117

TABLE XV.

Nativity of Admitted, Fiscal Year 1906-1907.

NATIVITY.	Men.	Women.	Total.
Canada	1	1	1
Connecticut	1	2	1
England	1	2	2
Germany	34	39	73
Indiana	1	1	1
Iowa	1	1	1
Ireland	1	3	4
Kentucky	1	1	1
Maine	1	1	2
New York	7	12	19
Ohio	1	3	4
Pennsylvania	1	1	1
Tennessee	1	1	1
Virginia	2	2	2
Wales	2	1	3
Unknown	49	68	117

TABLE XVI.

Admitted by Counties, Fiscal Year 1906-1907.

COUNTIES.	Men.	Women.	Total.
Adams	2	8	2
Allen	4	1	12
Blackford	6	1	7
Decatur	1	2	3
Delaware	6	5	11
Fayette	1	3	4
Franklin	1	1	2
Grant	5	11	16
Henry	2	1	3
Jay	2	7	9
Madison	7	12	19
Randolph	3	5	8
Rush	5	3	8
Union	1	1	1
Wayne	2	8	10
Wells	1	1	2
Total	49	68	117

TABLE XVII.

Clothing Supply of Admitted, Fiscal Year 1906-1907.

CLOTHING SUPPLIED.	Men.	Women.	Total.
By friends	29	53	82
By counties	20	15	35
Total	49	68	117

TABLE XVIII.

Mortality Record, Fiscal Year 1906-1907.

Register Number.	Sex.	Age in Years at Death.	Age at First Attack.	Age at First Admission.	Number of Admissions.	Age at Last Admission.	Duration of Last Attack.	Duration of Life After First Attack.	Nativity.	Form of Disease.	Cause of Death.
477	Man.	64	23	25	2	48	43 years.	43 years.	Indiana.	Chronic dementia.	Cerebral effusion.
400	Man.	54	14	39	1	39	40 years.	40 years.	Indiana.	Epileptic dementia.	Pulmonary tuberculosis.
2400	Man.	56	62	65	1	65	3 years.	3 years.	Ireland.	Chronic dementia.	Exhaustion.
2297	Man.	57	55	55	1	55	1 year.	1 year.	Indiana.	Paretic dementia.	General paresis.
2453	Man.	41	39	40	1	40	2 years.	2 years.	Ohio.	Paretic dementia.	Apoplexy.
2390	Man.	64	61	63	1	63	3 years.	3 years.	Indiana.	Organic dementia.	Acute enteritis.
103	Man.	72	11	55	1	55	51 years.	51 years.	Indiana.	Chronic dementia.	Exhaustion.
2413	Man.	43	42	42	1	42	1 year.	1 year.	Ohio.	Organic dementia.	Exhaustion.
2196	Man.	59	54	55	1	55	3 years.	3 years.	Kentucky.	Paretic dementia.	Acute enteritis.
2471	Man.	36	35	36	1	36	1 year.	1 year.	Indiana.	Paretic dementia.	Exhaustion.
2447	Man.	27	25	26	1	26	1½ years.	1½ years.	Indiana.	Organic dementia.	General paresis.
1486	Man.	67	47	47	2	60	14 years.	21 years.	Indiana.	Chronic mania.	Cerebral effusion.
2217	Man.	80	76	78	1	78	4 years.	8 years.	England.	Chronic dementia.	Carcinoma of stomach.
1574	Man.	31	23	25	1	25	8 years.	8 years.	Indiana.	Chronic dementia.	Organic heart disease.
213	Man.	63	41	46	1	46	22 years.	22 years.	Ohio.	Chronic mania.	Pulmonary tuberculosis.
2300	Man.	40	37	38	1	38	3 years.	3 years.	Indiana.	Organic dementia.	Tuberculosis of knee joint.
2409	Man.	52	51	52	1	52	1½ years.	1½ years.	Ohio.	Organic dementia.	Inanition.
2371	Man.	56	55	55	1	55	1½ years.	1½ years.	Indiana.	Simple melancholia.	Acute meningitis.
2129	Man.	37	33	33	1	33	3 years.	3 years.	Indiana.	Paretic dementia.	Died while on furlough.
2436	Man.	61	60	60	1	60	1 year.	1 year.	U. S.	Paretic dementia.	General paresis.
2440	Man.	48	46	47	1	47	2 years.	2 years.	Indiana.	Paretic dementia.	Aspiration pneumonia.
1224	Man.	54	44	41	1	44	10 years.	10 years.	Indiana.	Chronic mania.	Pulmonary oedema.
Averages....		53.2	42.9	51.1	1.1	48.2	9.9 years.	10.2 years.			

2099	Woman.....	63	58	61	1	61	5 years.....	5 years.....	Indiana.....	Chronic mania.....	Organic heart disease.
139	Woman.....	57	34	34	2	40	17 years.....	17 years.....	Indiana.....	Chronic dementia.....	Organic heart disease.
1250	Woman.....	39	30	30	1	30	9 years.....	9 years.....	Ohio.....	Chronic dementia.....	Pulmonary tuberculosis.
2432	Woman.....	41	38	41	1	41	3 years.....	3 years.....	Canada.....	Parietic dementia.....	Embolism.
2344	Woman.....	54	53	53	1	53	1½ years.....	1½ years.....	Ohio.....	Parietic dementia.....	Cerebral tumor.
2323	Woman.....	42	38	40	1	40	2½ years.....	2½ years.....	Indiana.....	Parietic dementia.....	General paresis.
2081	Woman.....	39	36	36	1	36	3 years.....	3 years.....	Indiana.....	Organic dementia.....	Cerebral tumor.
574	Woman.....	52	37	37	1	37	15 years.....	15 years.....	Indiana.....	Chronic dementia.....	Influenza.
2029	Woman.....	79	64	65	1	65	15 years.....	15 years.....	Indiana.....	Chronic dementia.....	Influenza.
2016	Woman.....	47	33	33	1	33	14 years.....	14 years.....	Ireland.....	Parietic dementia.....	General paresis.
99	Woman.....	67	50	50	3	50	37 years.....	37 years.....	Indiana.....	Chronic dementia.....	Pulmonary tuberculosis.
848	Woman.....	36	24	24	1	24	12 years.....	12 years.....	Indiana.....	Chronic mania.....	Pulmonary tuberculosis.
1149	Woman.....	68	59	59	1	59	9 years.....	9 years.....	Indiana.....	Chronic mania.....	Influenza.
2191	Woman.....	73	60	70	1	70	13 years.....	13 years.....	Indiana.....	Chronic dementia.....	Organic heart disease.
594	Woman.....	47	32	32	1	32	15 years.....	15 years.....	Indiana.....	Chronic dementia.....	Pulmonary tuberculosis.
2047	Woman.....	81	78	78	1	78	3½ years.....	3½ years.....	Ireland.....	Chronic dementia.....	Influenza.
2385	Woman.....	24	23	23	1	23	1 year.....	1 year.....	Turkey.....	Simple melancholia.....	Pulmonary tuberculosis.
2482	Woman.....	39	39	39	1	39	2 months.....	2 months.....	Indiana.....	Acute mania.....	Pulmonary tuberculosis.
1604	Woman.....	76	67	70	1	70	9 years.....	9 years.....	New Jersey.....	Epileptic dementia.....	Exhaustion of acute mania.
1039	Woman.....	48	28	28	1	28	20 years.....	20 years.....	Ohio.....	Chronic dementia.....	Abdominal tumor.
314	Woman.....	72	40	40	6	61	32 years.....	32 years.....	Indiana.....	Recurrent mania.....	Angina pectoris.
71	Woman.....	38	18	21	1	21	20 years.....	20 years.....	Indiana.....	Chronic mania.....	Pulmonary tuberculosis.
1186	Woman.....	57	25	40	1	40	32 years.....	32 years.....	Indiana.....	Epileptic dementia.....	Acute enteritis.
502	Woman.....	87	60	60	4	75	27 years.....	27 years.....	New York.....	Chronic dementia.....	Organic heart disease.
2473	Woman.....	59	30	30	1	30	29 years.....	29 years.....	Ohio.....	Chronic dementia.....	Pulmonary tuberculosis.
2519	Woman.....	45	45	45	1	45	8 months.....	8 months.....	Wales.....	Acute mania.....	Acute enteritis.
1038	Woman.....	58	57	58	1	58	14 months.....	14 months.....	Ohio.....	Acute mania.....	Apoplexy.
2514	Woman.....	34	30	30	2	30	4 years.....	4 years.....	Indiana.....	Paranoia.....	Pulmonary tuberculosis.
2491	Woman.....	52	50	52	1	52	2 years.....	2 years.....	Indiana.....	Chronic mania.....	Hypostatic pneumonia.
2521	Woman.....	37	37	37	1	37	6 months.....	6 months.....	Indiana.....	Acute mania.....	Multiple sclerosis.
2529	Woman.....	40	38	38	2	40	2 years.....	2 years.....	New York.....	Simple melancholia.....	Acute meningitis.
2508	Woman.....	46	37	42	2	44	7 years.....	7 years.....	Indiana.....	Chronic mania.....	Organic heart disease.
	Woman.....	55	54	55	1	55	1½ years.....	1½ years.....	Ohio.....	Organic dementia.....	Cerebral tumor.
Averages....		53.1	42.1	43.9	1.4	43.8	10.7 years.	10.9 years.			

TABLE XIX.

Mortality Record for Twelve Years, November 1, 1895, to September 30, 1907.

Whole Number Under Treatment.			Whole Number Died.			Averages.	Men.	Women.
Men.	Women.	Total.	Men.	Women.	Total.			
1,055	1,064	2,119	299	242	541	Average age at first attack.....	40.1 years....	37.4 years.
.....	Average age at first admission.....	41.6 years....	40.3 years.
.....	Average number of admissions.....	1.21.....	1.29
.....	Average age at last admission.....	43.1 years....	41.1 years.
.....	Average duration of last attack.....	8 years.....	6.3 years.
.....	Average duration of life after first attack.....	8.2 years....	8.86 years.
.....	Percentage of deaths on whole number under treatment.....	28.3 per cent.	22.8 per cent.

FISCAL TABLES

WITH

MEDICAL SUPERINTENDENT'S REPORT.

EXHIBIT 1.

SUMMARY OF RECEIPTS AND EXPENDITURES FOR THE FISCAL YEAR (ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907.

Maintenance—

Appropriation for 700 patients for eleven months		\$106,333 33
Appropriation for 30+ patients at \$146.66.....		4,442 86
Disbursements, Exhibit 2.....	\$109,527 61	
Covered into general fund.....	1,230 58	
Total	\$110,758 19	\$110,758 19

Repairs—

Appropriation for eleven months.....		\$5,500 00
Disbursements, Exhibit 4.....	\$5,497 17	
Covered into general fund.....	2 83	
Total	\$5,500 00	\$5,500 00

Clothing—

Appropriation for eleven months.....		\$4,583 34
Disbursements, Exhibit 6.....	\$3,197 63	
Covered into general fund.....	1,385 71	
Total	\$4,583 34	\$4,583 34

Specific Fund—Railway Crossing—

Appropriation available April 1, 1907.....		\$2,500 00
Disbursements, Exhibit 8.....	\$1,279 92	
Balance in treasury.....	1,220 08	
Total	\$2,500 00	\$2,500 00

Earnings—

Receipts from sales, Exhibit 9.....		\$256 32
Covered into general fund.....	\$256 32	
Total	\$ 256 32	\$256 32

EXHIBIT 2.

SHOWING CLASSIFIED EXPENDITURES ON ACCOUNT OF MAIN-
TENANCE FOR THE FISCAL YEAR (ELEVEN MONTHS)
ENDING SEPTEMBER 30, 1907.

Groceries	\$655 69
Eggs	1,829 94
Breadstuffs	3,696 69
Rolled oats, rice and hominy.....	1,676 30
Cheese	587 24
Syrup and vinegar.....	571 01
Poultry	1,063 53
Canned goods	684 50
Sugar	2,645 09
Cured meats	2,047 82
Butterine	3,106 38
Fresh meats	10,077 56
Buttermilk	190 00
Vegetables	1,523 92
Fish and oysters.....	669 20
Fresh fruits	471 55
Dried fruits	485 19
Coffee	1,389 00
Lard	380 54
Tea	212 25
Hardware	185 39
Undertaking	12 00
Cooking utensils	44 00
Belts and pulleys	12 58
Lumber	130 66
Soap and sal-soda.....	718 37
Furniture	275 50
Sanitary supplies	281 25
Cutlery	39 65
Harness and horse millinery.....	114 05
Trees, shrubs and plants.....	71 42
Napery	336 55
Carpets and curtains.....	570 32
Drugs and surgical instruments	798 35
Wire goods	21 08
Pipe and fittings	519 05

EXHIBIT 2—Continued.

Boiler and furnace supplies.....	320 65	
Tools	90 74	
Telephones	135 70	
Cold store supplies.....	151 13	
Farm implements	374 33	
Tobacco	696 31	
Engine and pump supplies.....	141 24	
Vehicles	139 00	
Electric light supplies.....	142 78	
Plowing and harvesting.....	167 10	
Blacksmithing	111 05	
House furnishings	512 39	
Dry goods	355 96	
Seeds and roots	279 75	
Tinware	167 63	
Woodenware and crockery.....	72 30	
Music and musical instruments.....	61 21	
Live stock	147 25	
Coal	13,046 45	
Provender	2,308 39	
Natural gas	1,003 50	
Queensware	438 73	
Printing and stationery.....	765 83	
Postage	250 00	
Telegrams	66 00	
Brooms, mops and brushes.....	230 10	
Toilet paper	265 00	
Salaries and wages.....	44,561 18	
Freight and express charges.....	135 16	
Chaplain	105 00	
Amusements	155 35	
Radiators	156 57	
Cement and tile.....	286 91	
Traveling expenses	243 01	
Library, newspapers and periodicals.....	102 55	
Fertilizers	219 33	
Electrical supplies	404 26	
Advertising	67 82	
Insurance	143 75	
Bedding	1,197 57	
Toweling	309 47	
Oils	283 42	
Laundry supplies	464 95	
Engineers' supplies	257 17	
Current expenses		\$109,527 61
Total	\$109,527 61	\$109,527 61

EXHIBIT 3.

LIST OF VOUCHERS SHOWING DISBURSEMENTS ON ACCOUNT OF
MAINTENANCE FOR THE FISCAL YEAR (ELEVEN MONTHS)
ENDING SEPTEMBER 30, 1907.

No.	To Whom Paid.	On Account of.	Amount.
1.	S. E. Smith, Med. Supt.	Monthly pay-roll	\$3,978 22
2.	The Gem Machine Co	Turning discs	25
3.	American Dairy Co	Butterine	1 25
4.	Miller's Harness Store	Repairing mitts	2 10
5.	The Peter Johnson Co	Cooking utensils	2 10
6.	Nicholson & Bro	Copy holder	2 25
7.	Nicholson Printing & Mfg. Co	Stitching reports	3 50
8.	Wm. H. Thomas & Co	Bed spreads	3 83
9.	W. W. Dilks	Cider	6 62
10.	John J. Hoerner	Yeast	8 00
11.	Richmond Home Telephone Co	Rental	9 00
12.	Schultz & Laning	Zinc table tops	14 00
13.	Richmond Cream Co	Buttermilk	16 00
14.	Hollweg & Reese	Queensware	23 40
15.	Henry Holzapfel	Tallow	25 61
16.	James Bros. Mfg. Co	Oil soap	31 85
17.	Miller & Hart	Mess pork	36 00
18.	Standard Oil Co	Oils	48 86
19.	J. K. McIntire & Co	Cheese	58 58
20.	Jones Hardware Co	Hose, belts and hardware	63 78
21.	Adam H. Bartel Co	Toweling and notions	72 85
22.	Sprague, Warner & Co	Groceries	87 00
23.	William Adair	Turkeys	122 06
24.	Mather Bros. Co	Coal	125 40
25.	A. G. Luken & Co	Drugs and sundries	128 07
26.	The John W. Grubbs Co	Groceries	172 75
27.	Swift & Co	Fresh meats	196 38
28.	Edmund P. Thayer	Poultry and eggs	270 60
29.	Kingan & Co	Butterine	270 90
30.	Champion Roller Milling Co	Breadstuffs and provender	306 00
31.	Geo. B. Miller	Corn	333 97
32.	Armour & Co	Fresh Beef	543 32
33.	J. R. Howard & Co	Groceries	627 58
34.	James L. Keach	Potatoes	897 53
35.	L. N. Cox & Son	Blacksmithing	3 78
36.	Central Union Telephone Co	Rental	15 00
37.	Julius Katte	Blacksmithing	21 38
38.	Richmond Natural Gas Co	Gas for November, 1906	88 00
39.	Bee-Hive Grocery Co	Groceries	98 36
40.	S. E. Smith	Incidental expense	113 21
41.	Richmond Abattoir Co	Cured meats and sausage	204 39
42.	Vandalia Coal Co	Coal	1,249 15
43.	Westinghouse Machine Co	Steam jet nozzles	7 20
44.	S. E. Smith, Med. Supt.	Monthly pay-roll	3,984 19
45.	Schneider's Carriage Factory	Carriage repairs	50
46.	Miller's Harness Store	Stable supplies	2 00
47.	Julius Katte	Blacksmithing	2 52
48.	Nicholson & Bro	Typewriter supplies	3 00
49.	W. H. Ross Drug Co	Druggists' sundries	4 45
50.	Henry Wilke	Queensware	5 40
51.	L. N. Cox & Son	Blacksmithing	5 90
52.	John J. Hoerner	Yeast	9 00
53.	Mather Bros. Co	Portland cement	12 60

EXHIBIT 3—Continued

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
54.	J. C. Hoover.....	Veterinary services.....	\$13 50
55.	The Geo. H. Knollenberg Co.....	Napery.....	13 95
56.	McNeil & Higgins Co.....	Dried fruits.....	15 50
57.	Ferd. Grothaus.....	Furniture.....	16 00
58.	Richmond Cream Co.....	Buttermilk.....	18 00
59.	Hackman, Klehfoth & Co.....	Wall plaster.....	20 60
60.	Henry Holzapfel.....	Tallow.....	26 00
61.	Sprague, Warner & Co.....	Groceries.....	27 30
62.	M. A. Hasty.....	Candy.....	30 00
63.	Carson, Pirie, Scott & Co.....	Dry goods.....	31 58
64.	Indiana Industrial Home.....	Brooms.....	33 00
65.	The G. H. Hammond Co.....	Mess pork.....	36 00
66.	The E. G. Hill Co.....	Greenhouse plants.....	39 10
67.	J. B. Gilbert.....	Milch cow.....	50 00
68.	J. K. McIntire & Co.....	Cheese.....	60 48
69.	E. F. Shideler & Co.....	Christmas supplies.....	62 50
70.	Bee-Hive Grocery Co.....	Groceries and oysters.....	81 63
71.	A. G. Luken & Co.....	Drugs and sundries.....	81 68
72.	Reid, Murdock & Co.....	Rolled oats and soap.....	88 15
73.	Richmond Natural Gas Co.....	Gas for December, 1906.....	91 75
74.	The John W. Grubbs Co.....	Groceries.....	97 54
75.	Hollweg & Reese.....	Queensware.....	97 70
76.	Wm. H. Thomas & Co.....	Quilts.....	100 00
77.	Berry-Suhling Tobacco Co.....	Tobacco.....	104 16
78.	John M. Eggemeyer.....	Eggs.....	112 20
79.	Richmond Abattoir Co.....	Cured meats and sausage.....	112 50
80.	American Radiator Co.....	Radiators.....	149 57
81.	Adam H. Bartel Co.....	Dry goods and furnishings.....	156 99
82.	William Adair.....	Poultry.....	177 93
83.	Jones Hardware Co.....	Chambers and hardware.....	127 98
84.	Swift & Co.....	Cured meats and dressed calves.....	248 10
85.	Kingan & Co.....	Butterine.....	252 00
86.	Elkhorn Roller Mills.....	Breadstuffs and provender.....	310 50
87.	Edmund P. Thayer.....	Eggs and poultry.....	332 00
88.	I. R. Howard & Co.....	Groceries and coffee.....	593 11
89.	Armour & Co.....	Fresh beef and cured meats.....	628 28
90.	Vandalia Coal Co.....	Coal.....	2,421 44
91.	S. E. Smith.....	Incidental expense.....	32 25
92.	S. E. Smith, Med. Supt.....	Monthly pay-roll.....	4,086 73
93.	Vaughan's Seed Store.....	Flower seeds.....	6 70
94.	Standard Electric Time Co.....	Electric light supplies.....	6 75
95.	John J. Hoerner.....	Yeast.....	8 50
96.	Richmond Home Telephone Co.....	Rental.....	9 00
97.	Vonnegut Hardware Co.....	Hardware.....	11 00
98.	Enterprise Pottery.....	Flower pots.....	13 05
99.	L. C. Hoover.....	Veterinary services.....	14 50
100.	Central Union Telephone Co.....	Rental.....	15 00
101.	The Brownell Co.....	Engineers' supplies.....	15 86
102.	Sprague, Warner & Co.....	Groceries.....	16 88
103.	Western Electric Co.....	Electric light supplies.....	17 52
104.	Richmond Cream Co.....	Buttermilk.....	18 00
105.	Richmond City Mill Works.....	Grate bars.....	21 20
106.	J. I. Holcomb Mfg. Co.....	Brushes.....	27 00
107.	Bee-Hive Grocery Co.....	Groceries.....	27 03
108.	The John W. Grubbs Co.....	Groceries.....	27 45
109.	Henry Holzapfel.....	Tallow.....	28 34
110.	Standard Oil Co.....	Oils.....	29 25
111.	The G. H. Hammond Co.....	Mess pork.....	36 00

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
112.	William Adair.....	Poultry.....	\$50 40
113.	J. W. Hanan, Trustee.....	Salary and expense.....	67 30
114.	A. G. Luken & Co.....	Dispensary supplies.....	69 05
115.	Jones Hardware Co.....	Belting, hardware and fittings..	76 03
116.	J. L. Cowing, Trustee.....	Salary and expense.....	84 35
117.	J. Detamore, Trustee.....	Salary and expense.....	84 90
118.	Schultz & Laning.....	Tinware.....	85 00
119.	Richmond Natural Gas Co.....	Gas for January, 1907.....	97 50
120.	Richmond Abattoir Co.....	Fresh and cured meats.....	112 51
121.	J. K. McIntire & Co.....	Groceries.....	146 31
122.	I. R. Howard & Co.....	Groceries.....	177 31
123.	Swift & Co.....	Fresh meats.....	234 63
124.	Kingan & Co.....	Butterine.....	315 00
125.	Champion Roller Milling Co.....	Breadstuffs and provender.....	317 00
126.	Armour & Co.....	Beef, lard and bacon.....	816 56
127.	Vandalia Coal Co.....	Coal.....	1,574 77
128.	Miller's Harness Store.....	Sewing leather mitts.....	1 00
129.	L. N. Cox & Son.....	Blacksmithing.....	2 07
130.	Nicholson & Bro.....	Calendar stands.....	2 55
131.	Ferd. Grothaus.....	Repairing chairs.....	4 50
132.	Louck & Hill Co.....	Lumber.....	5 40
133.	Charles Hire.....	Straw.....	6 02
134.	Julius Katte.....	Blacksmithing.....	8 10
135.	Mather Bros. Co.....	Furnace supplies.....	17 04
136.	William Cain.....	Lumber.....	23 68
137.	Adam H. Bartel Co.....	House furnishings.....	50 69
138.	S. E. Smith.....	Incidental expense.....	49 83
139.	John M. Eggemeyer.....	Eggs.....	329 34
140.	S. E. Smith, Med Supt.....	Monthly pay-roll.....	4,037 62
141.	E. N. Turman.....	Cartage.....	1 50
142.	American Dairy Co.....	Butterine.....	1 60
143.	L. N. Cox & Son.....	Blacksmithing.....	3 06
144.	Julius Katte.....	Blacksmithing.....	3 15
145.	The B. F. Wissler Co.....	Advertising.....	5 34
146.	Hackman, Klefoth & Co.....	Lumber.....	6 00
147.	The Item Newspaper Co.....	Advertising.....	6 54
148.	The Palladium Co.....	Advertising.....	6 60
149.	John J. Hoerner.....	Yeast.....	8 00
150.	Geo. H. Nolte.....	Matting.....	9 75
151.	Adam H. Bartel Co.....	Cushion covers.....	12 33
152.	Henry R. Worthington.....	Pump supplies.....	13 44
153.	Richmond Cream Co.....	Buttermilk.....	16 00
154.	The Lagonda Mfg. Co.....	Boiler supplies.....	20 25
155.	Henry Holzapfel.....	Tallow.....	35 82
156.	J. H. Woods & Co.....	Fresh fish.....	47 70
157.	McNeil & Higgins Co.....	Groceries.....	48 05
158.	The John W. Grubbs Co.....	Groceries.....	49 95
159.	The Gem Machine Co.....	Work on elevator and boiler.....	52 49
160.	The G. H. Hammond Co.....	Cured meats.....	63 38
161.	J. K. McIntire & Co.....	Cheese.....	64 05
162.	Miller & Hart.....	Cured meats.....	65 66
163.	A. G. Luken & Co.....	Drugs.....	89 85
164.	Sprague, Warner & Co.....	Groceries.....	97 50
165.	Richmond Abattoir Co.....	Fresh and cured sausage.....	100 14
166.	William Adair.....	Poultry.....	118 14
167.	William B. Burford.....	Printing and stationery.....	122 28
168.	Charles Hire.....	Hay and straw.....	170 02
169.	Wm. H. Thomas & Co.....	Napery.....	171 50

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
170.	Jones Hardware Co.	Electrical supplies	\$174 80
171.	Kingan & Co.	Butterine	252 00
172.	Knight & Jillson Co.	Pipe and fittings	295 96
173.	Champion Roller Milling Co.	Breadstuffs and provender	329 00
174.	Armour & Co.	Fresh meats	773 60
175.	I. R. Howard & Co.	Groceries	1,177 40
176.	Miller's Harness Store	Repairing harness	85
177.	Carson, Pirie, Scott & Co.	Dry goods and notions	4 26
178.	Bee-Hive Grocery Co.	Groceries	35 38
179.	S. E. Smith	Incidental expense	110 22
180.	Peter Henderson & Co.	Garden seeds	95 60
181.	Richmond Natural Gas Co.	Gas for February, 1907	98 00
182.	Charles H. Meyer	Farm tile	108 57
183.	Vandalia Coal Co.	Coal	1,849 32
184.	Jas. Clark, Jr., & Co.	Electrical supplies	266 96
185.	S. E. Smith, Med. Supt.	Monthly pay-roll	4,022 05
186.	American Laundry Machinery Co.	Hinge for washer	2 91
187.	The Gem Machine Co.	Eccentric cap	3 07
188.	John J. Hoerner	Yeast	9 00
189.	Wilson & Pohlmeier	Undertaking	12 00
190.	J. K. McIntire & Co.	Groceries	12 45
191.	Standard Oil Co.	Oils	14 70
192.	Geo. W. Deuker	Queensware	14 80
193.	Richmond Cream Co.	Buttermilk	18 00
194.	Louck & Hill Co.	Wood and mill work	21 96
195.	Charles H. Meyer	Farm tile	22 50
196.	Charles Mayer & Co.	Base-ball supplies	23 25
197.	Schultz & Laning	Tinware	32 10
198.	Bee-Hive Grocery Co.	Groceries	32 59
199.	Indiana Industrial Home	Brooms	33 00
200.	Carson, Pirie, Scott & Co.	Dry goods	37 60
201.	Wm. Hill & Co.	Clover seed	38 00
202.	The J. M. Bour Co.	Tea	52 36
203.	Steele-Wedeles Co.	Soap	75 75
204.	The John W. Grubbs Co.	Groceries	79 61
205.	A. G. Luken & Co.	Dispensary supplies	83 25
206.	Sprague, Warner & Co.	Groceries	88 30
207.	Richmond Natural Gas Co.	Gas for March, 1907	94 00
208.	Hollweg & Reese	Queensware	115 71
209.	Dougan & Co.	Insurance	117 50
210.	J. H. Woods & Co.	Fresh fish	123 85
211.	Edmund P. Thayer	Eggs	129 60
212.	Richmond Abattoir Co.	Sausage	132 67
213.	Jones Hardware Co.	Roofing and hardware	136 25
214.	C. W. Kemper	Potatoes	181 54
215.	Swift & Co.	Fresh meats	198 96
216.	Henry Zuttermeister	Potatoes	213 20
217.	Adam H. Bartel Co.	Dry goods	248 61
218.	Champion Roller Milling Co.	Flour and feed	364 50
219.	I. R. Howard & Co.	Groceries	429 39
220.	Armour & Co.	Fresh beef and butterine	982 26
221.	Vandalia Coal Co.	Coal	1,425 00
222.	Schneider's Carriage Factory	Repairing carriage lamps	50
223.	The Peter Johnson Co.	Cooking utensils	1 65
224.	E. N. Turman	Cartage	3 00
225.	L. N. Cox & Son	Blacksmithing	3 78
226.	Miller's Harness Store	Stable sundries	3 85
227.	W. H. Ross Drug Co.	Photographic supplies	3 95

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
228.	Julius Katte	Blacksmithing	\$5 04
229.	Henry R. Worthington	Pump lever	5 74
230.	William Adair	Ducks	7 25
231.	Geo. H. Nolte	Window shades and rugs	7 61
232.	E. F. Shideler & Co.	Oranges	15 00
233.	J. Runge & Co.	Alfalfa seed	20 00
234.	Mather Bros. Co.	Cement	29 40
235.	S. E. Smith	Incidental expense	39 90
236.	Geo. H. Lane	Poultry	56 00
237.	William Cain	Lumber	70 56
238.	The Wayne Works	Boiler castings	135 90
239.	S. E. Smith, Med. Supt.	Monthly pay-roll	4,066 30
240.	Vaughan's Seed Store	Seeds	4 00
241.	Henry R. Worthington	Pump valves	8 96
242.	Richmond Home Telephone Co.	Rental	9 00
243.	Central Union Telephone Co.	Rental	15 00
244.	Richmond Cream Co.	Buttermilk	18 00
245.	Standard Oil Co.	Oils	18 41
246.	Dille & McGuire Mfg. Co.	Repairing lawn mowers	22 75
247.	Sprague, Warner & Co.	Groceries	24 36
248.	Henry Holzapfel	Tallow	26 32
249.	Henry Vogt Machine Co.	Ice cans	31 48
250.	Bee-Hive Grocery Co.	Groceries	34 33
251.	The G. H. Hammond Co.	Cured meats	37 00
252.	Richmond Chair Co.	Repairing furniture	38 50
253.	Adam H. Bartel Co.	House furnishings	45 25
254.	The Standard Electric Co.	Electrical supplies	49 48
255.	McNeil & Higgins Co.	Groceries	59 93
256.	Wm. H. Thomas & Co.	Awning goods	68 85
257.	General Electric Co.	Electric lamps	72 00
258.	J. Detamore, Trustee	Salary and expense	85 20
259.	J. L. Cowing, Trustee	Salary and expense	87 15
260.	Henry Zuttermeister	Potatoes	89 70
261.	Steele-Wedeles Co.	Groceries	98 00
262.	Jacob Kern	Repairing steam boilers	100 00
263.	Berry-Suhling Tobacco Co.	Tobacco	103 50
264.	J. W. Hanan, Trustee	Salary and expense	105 95
265.	A. G. Luken & Co.	Drugs and sundries	115 15
266.	Richmond Abattoir Co.	Sausage	116 01
267.	J. H. Woods & Co.	Fish	117 34
268.	J. K. McIntire & Co.	Soap and cheese	124 79
269.	Edmund P. Thayer	Eggs	240 00
270.	Jas. B. Clow & Sons	Sanitary fixtures	272 00
271.	I. R. Howard & Co.	Groceries	283 06
272.	Jones Hardware Co.	Tools, fertilizer and belts	330 97
273.	Champion Roller Milling Co.	Breadstuffs and provender	343 60
274.	Armour & Co.	Fresh meats and butterine	946 97
275.	Schneider's Carriage Factory	Repairing carriage	50
276.	Geo. W. Deuker	Lamp chimneys	1 00
277.	Miller's Harness Store	Stable sundries	1 40
278.	The Peter Johnson Co.	Cooking utensils	1 85
279.	Wm. Hill & Co.	Chicken feed	2 10
280.	E. F. Shideler & Co.	Seed potatoes	3 00
281.	E. N. Turman	Cartage	3 00
282.	Schultz & Laning	Repairing ice cans	4 45
283.	W. H. Bartel, Jr.	Transfer cases	4 73
284.	Nicholson Printing & Mfg. Co.	Filing tubes	5 25
285.	Geo. H. Nolte	Rugs	5 95

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
286.	Julius Katte	Blacksmithing	\$6 98
287.	John J. Hoerner	Yeast	8 00
288.	The John W. Grubbs Co.	Groceries	8 45
289.	The Gem Machine Co.	Repairing steam pump	8 68
290.	O. H. Little	Fertilizer	9 00
291.	T. C. Taylor	Fertilizer	12 50
292.	L. N. Cox & Son	Fertilizer and blacksmithing	13 52
293.	John M. Eggemeyer	Groceries	14 82
294.	H. S. Wynn	Fertilizer	16 00
295.	Westinghouse Machine Co.	Stoker guards	19 26
296.	Swift & Co.	Fresh meats	241 26
297.	Richmond Natural Gas Co.	Gas for April, 1907	105 50
298.	Vandalia Coal Co.	Coal	1,505 86
299.	S. E. Smith	Incidental expense	100 51
300.	S. E. Smith, Med. Supt.	Monthly pay-roll	3,972 18
301.	Williams Tool Co.	Pipe dies	2 25
302.	Barbee Wire & Iron Works	Wire baskets	5 00
303.	The Item Newspaper Co.	Advertising	6 54
304.	John J. Hoerner	Yeast	9 00
305.	The Palladium Printing Co.	Advertising	9 20
306.	Edgar A. Murray	Drugs	10 00
307.	Wm. Hill & Co.	Seeds and chick feed	11 05
308.	Richmond Cream Co.	Buttermilk	16 00
309.	McNeil & Higgins Co.	Groceries	17 16
310.	The John W. Grubbs Co.	Groceries	20 60
311.	American Laundry Machinery Co.	Laundry supplies	24 75
312.	Dougan & Co.	Insurance	26 25
313.	Henry Holzapfel	Tallow	27 04
314.	Illinois Electric Co.	Storage batteries	31 55
315.	Standard Oil Co.	Oils	35 58
316.	Schwarzschild & Sulzberger Co.	Cured meats	38 00
317.	Bee-Hive Grocery Co.	Groceries	39 04
318.	The Gem Machine Co.	Repairing steam pump	43 11
319.	Geo. H. Nolte	Carpets and curtains	44 99
320.	The E. G. Hill Co.	Shrubs	45 10
321.	H. W. Johns-Manville Co.	Pipe covering	49 62
322.	W. E. Wright	Corn	54 28
323.	Hollweg & Reese	Queensware	80 85
324.	Sprague, Warner & Co.	Groceries	87 31
325.	Steele-Wedeles Co.	Groceries	96 87
326.	Adam H. Bartel Co.	Dry goods	97 44
327.	A. G. Luken & Co.	Dispensary supplies	103 01
328.	Edmund P. Thayer	Eggs	115 20
329.	Richmond Abattoir Co.	Sausage	120 23
330.	J. H. Woods & Co.	Fresh fish	141 72
331.	Charles Hire	Corn and plowing	149 86
332.	Swift & Co.	Fresh meats	213 20
333.	Jones Hardware Co.	Packing and hardware	222 06
334.	William B. Burford	Printing and stationery	343 89
335.	Champion Roller Milling Co.	Breadstuffs and provender	347 50
336.	Schultz & Laning	Galvanized iron float	1 35
337.	L. C. Hoover	Veterinary services	2 00
338.	L. N. Cox & Son	Blacksmithing	2 21
339.	C. & W. Kramer	Posts	3 36
340.	E. N. Turman	Cartage	3 75
341.	The Geo. H. Knollenberg Co.	Napery	6 78
342.	Julius Katte	Blacksmithing	7 38
343.	C. B. Wolfe	Vinegar	11 00

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
344.	Geo. W. Deuker	Queensware	\$14 00
345.	Ferd. Grothaus	Furniture	16 50
346.	C. M. Thompson	Corn	33 15
347.	S. E. Smith	Incidental expense	32 16
348.	Richmond Natural Gas Co.	Gas for May, 1907	97 75
349.	Armour & Co.	Fresh beef and butterine	834 96
350.	Vandalia Coal Co.	Coal	1,215 08
351.	I. R. Howard & Co.	Sugar, coffee and groceries	1,481 63
352.	S. E. Smith, Med. Supt.	Monthly pay-roll	3,849 33
353.	Singer Sewing Machine Co.	Shuttle	1 00
354.	American Dairy Co.	Butterine	1 35
355.	L. N. Cox & Son	Blacksmithing	2 52
356.	Wm. Hill & Co.	Seeds	2 75
357.	The McConaha Co.	Mower sections	3 00
358.	Miller's Harness Store	Stable sundries	3 90
359.	Mather Bros. Co.	Lime	4 40
360.	Julius Katte	Blacksmithing	5 04
361.	John J. Hoerner	Yeast	9 00
362.	Richmond Cream Co.	Buttermilk	18 00
363.	Charles H. Meyer	Farm tile	20 00
364.	The Gem Machine Co.	Repairing steam engine	20 59
365.	Bee-Hive Grocery Co.	Groceries	25 66
366.	Indiana Industrial Home	Brooms	33 00
367.	Jas. B. Clow & Sons	Drain mats	39 00
368.	Adam H. Bartel Co.	Dry goods and notions	40 45
369.	Carson, Pirie, Scott & Co.	Dry goods	60 83
370.	Miller & Hart	Bacon	69 85
371.	Richmond Abattoir Co.	Sausage	79 00
372.	Sprague, Warner & Co.	Groceries	85 00
373.	Geo. B. Miller	Hay and straw	86 67
374.	A. G. Luken & Co.	Dispensary supplies	100 20
375.	Berry-Suhling Tobacco Co.	Tobacco	106 08
376.	J. K. McIntire & Co.	Cheese and dried fruits	106 78
377.	J. H. Woods & Co.	Fresh fish	113 54
378.	Edmund P. Thayer	Eggs	122 40
379.	Jones Hardware Co.	Stable supplies and hardware	127 68
380.	Swift & Co.	Fresh meats	216 91
381.	The G. H. Hammond Co.	Fresh and cured meats	245 26
382.	Nicholson & Bro.	Toilet paper	265 35
383.	Champion Roller Milling Co.	Breadstuffs and provender	370 50
384.	I. R. Howard & Co.	Groceries	566 94
385.	Armour & Co.	Fresh meats and butterine	818 62
386.	E. N. Turman	Cartage	3 00
387.	Stephen Kuth	Plants	10 00
388.	Consolidated Fireworks Co.	Fireworks	20 20
389.	Richmond Natural Gas Co.	Gas for June, 1907	87 25
390.	S. E. Smith	Incidental expense	126 84
391.	Vandalia Coal Co.	Coal	346 15
392.	S. E. Smith, Med. Supt.	Monthly pay-roll	3,902 49
393.	Richmond Home Telephone Co.	Rental	6 00
394.	John J. Hoerner	Yeast	8 00
395.	Central Union Telephone Co.	Rental	10 00
396.	Richmond Chair Co.	Veneered seats	12 00
397.	Wm. H. Armstrong & Co.	Surgical instruments	17 17
398.	Richmond Cream Co.	Buttermilk	18 00
399.	Adam H. Bartel Co.	Notions	18 05
400.	Dille & McGuire Mfg. Co.	Lawn mowers	21 75
401.	Mather Bros. Co.	Cement and lime	25 40

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
402.	Barrett Mfg. Co.	Anhydrous ammonia	\$26 78
403.	Henry Holzapfel	Tallow	27 30
404.	The J. M. Bour Co.	Tea	30 07
405.	The John W. Grubbs Co.	Groceries	33 38
406.	Schultz & Laning	Tinware	34 70
407.	J. K. McIntire & Co.	Groceries	35 76
408.	Swift & Co.	Cured meats	36 50
409.	Standard Oil Co.	Oils	44 79
410.	The Starr Piano Co.	Tuning pianos	50 00
411.	J. B. Gilbert	Milch cow	60 00
412.	The G. H. Hammond Co.	Cured meats	61 18
413.	Jones Hardware Co.	Hardware and razors	77 86
414.	Richmond Abattoir Co.	Sausage	79 32
415.	Edward Barrett, Trustee	Salary and expense	83 61
416.	J. L. Cowing, Trustee	Salary and expense	83 98
417.	J. Detamore, Trustee	Salary and expense	84 36
418.	Miller & Hart	Cured meats	87 04
419.	J. W. Hanan, Trustee	Salary and expense	100 06
420.	William B. Burford	Printing and stationery	100 56
421.	A. G. Luken & Co.	Dispensary supplies	103 46
422.	Carson, Pirie, Scott & Co.	Toweling	103 92
423.	Sprague, Warner & Co.	Groceries	132 54
424.	E. F. Shideler & Co.	Fruits and vegetables	149 05
425.	Edmund P. Thayer	Chickens and eggs	234 40
426.	I. R. Howard & Co.	Groceries	412 62
427.	Champion Roller Milling Co.	Breadstuffs and provender	433 85
428.	Armour & Co.	Fresh and cured meats	1,475 28
429.	The McConaha Co.	Rivets	25
430.	E. N. Turman	Cartage	75
431.	Miller's Harness Store	Stable supplies	1 30
432.	L. N. Cox & Son	Blacksmithing	5 04
433.	Geo. H. Nolte	Curtain goods	5 10
434.	Julius Katte	Blacksmithing	6 30
435.	DeWitt C. Russell	Plowing	7 00
436.	The Geo. H. Knollenberg Co.	Blankets	10 50
437.	Geo. W. Deuker	Queensware	12 25
438.	John M. Eggemeyer	Groceries	14 41
439.	Bee-Hive Grocery Co.	Groceries	15 87
440.	Geo. B. Miller	Harvesting oats	17 00
441.	S. E. Smith	Incidental expense	73 30
442.	Richmond Natural Gas Co.	Gas for July, 1907	90 25
443.	Chas. & Harvey Hire	Timothy hay	168 54
444.	Vandalia Coal Co.	Coal	290 36
445.	Wm. H. Cook	Timothy hay	247 50
446.	S. E. Smith, Med. Supt.	Monthly pay-roll	3,832 36
447.	Geo. W. Deuker	Queensware	10 90
448.	Schultz & Laning	Tinware	11 25
449.	William B. Burford	Printing and stationery	12 60
450.	The Item Newspaper Co.	Advertising	12 79
451.	The E. G. Hill Co.	Plants	16 32
452.	Hackman, Klehfoth & Co.	Sewer pipe	17 10
453.	Richmond Cream Co.	Buttermilk	18 00
454.	Palladium Printing Co.	Advertising	18 60
455.	Garver & Meyer	Melons	24 00
456.	Henry Holzapfel	Tallow	25 35
457.	The Advance Co.	Window devices	30 32
458.	Indiana Industrial Home	Brooms	33 00
459.	Mather Bros. Co.	Sewer pipe	35 00

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
460.	Miller & Hart	Cured meats	\$35 50
461.	Bee-Hive Grocery Co.	Groceries	35 58
462.	Carson, Pirie, Scott & Co.	Dry goods	37 86
463.	Indiana Reformatory	Mop heads	41 60
464.	O. A. Kemper	Melons	43 75
465.	Hollweg & Reese	Queensware	43 87
466.	J. K. McIntire & Co.	Cheese	56 00
467.	A. G. Luken & Co.	Drugs	56 97
468.	Omer G. Whelan	Corn	57 95
469.	Jones Hardware Co.	Hardware and scales	97 44
470.	Berry-Suhling Tobacco Co.	Tobacco	100 04
471.	Lee B. Nusbaum	Dry goods	110 00
472.	Sprague, Warner & Co.	Groceries	135 69
473.	Richmond Abattoir Co.	Cured meats	154 25
474.	E. F. Shideler & Co.	Fruits and vegetables	154 40
475.	Swift & Co.	Fresh meats	173 94
476.	Edmund P. Thayer	Chickens and eggs	234 40
477.	The G. H. Hammond Co.	Fresh and cured meats	235 89
478.	Amos Wolfe	Timothy hay	276 58
479.	Champion Roller Milling Co.	Flour and feed	423 75
480.	I. R. Howard & Co.	Groceries and sugar	477 23
481.	The John W. Grubbs Co.	Groceries and coffee	493 75
482.	Armour & Co.	Fresh beef and butterine	943 29
483.	Richmond Home Telephone Co.	Fuses	1 00
484.	Vaughan's Seed Store	Flower seeds	1 90
485.	The Peter Johnson Co.	Cooking utensils	2 25
486.	The Capital City Dairy Co.	Butterine	2 43
487.	L. N. Cox & Son	Blacksmithing	2 52
488.	Adam H. Bartel Co.	Table covers	3 33
489.	John M. Eggemeyer	Groceries	4 30
490.	Julius Katte	Blacksmithing	5 72
491.	Richmond City Water Works	Cast iron pipe	8 24
492.	The McConaha Co.	Mower repairs	9 75
493.	John J. Hoerner	Yeast	10 00
494.	Chas. Hire	Threshing oats	19 50
495.	S. E. Smith	Incidental expense	113 12
496.	Geo. B. Miller	Straw	65 10
497.	Richmond Natural Gas Co.	Gas for August, 1907	84 50
498.	C. C. Person	Lard	205 20
499.	Vandalia Coal Co.	Coal	196 62
500.	S. E. Smith, Med. Supt.	Monthly pay-roll	3,796 71
501.	Wm. H. Thomas & Co.	Rubber blankets	2 73
502.	The Item Newspaper Co.	Advertising	4 36
503.	W. H. Ross Drug Co.	Photographic supplies	4 85
504.	Palladium Printing Co.	Advertising	4 90
505.	Chas. H. Meyer	Farm tile	7 31
506.	O. H. Little	Fertilizer	7 50
507.	John J. Hoerner	Yeast	8 25
508.	H. S. Wynn	Fertilizer	13 33
509.	Richmond Cream Co.	Buttermilk	16 00
510.	The Advance Co.	Repairing steam pump	17 52
511.	T. C. Taylor	Fertilizer	20 83
512.	Henry Holzapfel	Tallow	21 25
513.	Wm. H. Armstrong & Co.	Surgical instruments	23 12
514.	The John W. Grubbs Co.	Groceries	23 82
515.	Schwarzschild & Sulzberger Co.	Hams	26 13
516.	Vaughan's Seed Store	Seeds and bulbs	30 20
517.	Eugene Dietzgen Co.	File case	36 00

EXHIBIT 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
518.	O. A. Kemper.....	Melons.....	\$36 08
519.	Standard Oil Co.....	Oils.....	38 72
520.	J. K. McIntire & Co.....	Cheese.....	54 15
521.	J. S. Henwood.....	Vinegar.....	54 40
522.	Edward Barrett, Trustee.....	Salary and expense.....	56 69
523.	J. Detamore, Trustee.....	Salary and expense.....	57 90
524.	J. L. Cowing, Trustee.....	Salary and expense.....	58 61
525.	Richmond Abattoir Co.....	Sausage.....	68 00
526.	J. W. Hanan, Trustee.....	Salary and expense.....	70 91
527.	Miller & Hart.....	Cured meats.....	79 77
528.	Sprague, Warner & Co.....	Groceries.....	133 93
529.	Swift & Co.....	Fresh meats.....	243 98
530.	Edmund P. Thayer.....	Poultry and eggs.....	248 80
531.	Champion Roller Milling Co.....	Breadstuffs and provender.....	409 05
532.	Armour & Co.....	Fresh and cured meats.....	707 26
533.	Vandalia Coal Co.....	Coal.....	847 30
534.	Miller's Harness Store.....	Stable supplies.....	1 35
535.	John M. Eggemeyer.....	Groceries.....	3 20
536.	Geo. W. Deuker.....	Queensware.....	20 15
537.	W. P. Taylor.....	Carpenter work.....	36 00
538.	Adam H. Bartel Co.....	House furnishings.....	53 85
539.	Richmond Natural Gas Co.....	Gas for September, 1907.....	69 00
540.	E. F. Shideler & Co.....	Melons.....	97 50
541.	Geo. W. Davis Carriage Co.....	Work on passenger wagon.....	137 50
542.	William B. Burford.....	Printing and stationery.....	167 47
543.	Kingan & Co.....	Butterine.....	229 50
544.	I. R. Howard & Co.....	Groceries.....	322 79
545.	The Beckman Co.....	Blankets.....	640 00
546.	Julius Katte.....	Blacksmithing.....	1 26
547.	L. N. Cox & Son.....	Blacksmithing and fertilizer.....	12 95
548.	Bee-Hive Grocery Co.....	Groceries.....	28 21
549.	A. G. Luken & Co.....	Drugs and sundries.....	86 84
550.	The G. H. Hammond Co.....	Fresh pork.....	174 63
551.	Jones Hardware Co.....	Electrical supplies and oils.....	192 64
552.	S. E. Smith.....	Incidental expense.....	64 77
553.	The Geo. H. Knollenberg Co.....	Napery.....	79 05
554.	E. F. Shideler & Co.....	Melons and peaches.....	52 00
555.	Charles Hire.....	Cutting ensilage.....	84 80
556.	Williams Tool Co.....	Machine dies.....	10 00
557.	Vaughan's Seed Store.....	Bulbs.....	28 75
558.	Wm. H. Thomas & Co.....	Rubber blankets.....	147 00
559.	Ferd. Grothaus.....	Furniture.....	161 50
560.	Geo. H. Nolte.....	Carpets and rugs.....	498 72
Total.....			\$109,527 61

EXHIBIT 4.

SHOWING CLASSIFIED EXPENDITURES ON ACCOUNT OF REPAIRS
FOR THE FISCAL YEAR (ELEVEN MONTHS) ENDING
SEPTEMBER 30, 1907.

Cement and tile work.....	\$354 30	
Lumber	50 42	
Paints and oils.....	623 42	
Hardware and glass.....	43 94	
Repair pay-roll	3,881 25	
Brick and stone.....	27 75	
Cement, tile and lime.....	41 54	
Roofs	420 00	
Registers	15 30	
Plastering	39 25	
Current expense		\$5,497 17
Total	\$5,497 17	\$5,497 17

EXHIBIT 5.

LIST OF VOUCHERS SHOWING DISBURSEMENTS ON ACCOUNT OF
REPAIRS FOR THE FISCAL YEAR (ELEVEN MONTHS)
ENDING SEPTEMBER 30, 1907.

No	To Whom Paid.	On Account of.	Amount.
1.	S. E. Smith, Med. Supt.....	Repair pay-roll.....	\$403 70
2.	A. G. Luken & Co.....	Paints.....	36 25
3.	William Cain.....	Lumber.....	50 42
4.	Charles Wagner.....	Cement work.....	54 40
5.	S. E. Smith, Med. Supt.....	Repair pay-roll.....	388 48
6.	Jones Hardware Co.....	Glass.....	15 60
7.	A. G. Luken & Co.....	Paints and oils.....	70 83
8.	Charles Wagner.....	Cement and tile work.....	166 70
9.	S. E. Smith, Med. Supt.....	Repair pay-roll.....	387 80
10.	Schultz & Laning.....	Repairing roofs.....	3 75
11.	Louck & Hill Co.....	Brick.....	27 75
12.	Mather Bros. Co.....	Cement.....	41 54
13.	A. G. Luken & Co.....	Paints.....	50 50
14.	Jones Hardware Co.....	Paints.....	89 70
15.	Chas. Wagner.....	Cement work.....	133 20
16.	S. E. Smith, Med. Supt.....	Repair pay-roll.....	339 05
17.	A. G. Luken & Co.....	Paints.....	7 50
18.	Steinhamp Bros.....	Plastering.....	39 25
19.	Jones Hardware Co.....	Paints and glass.....	41 83
20.	S. E. Smith, Med. Supt.....	Repair pay-roll.....	375 65
21.	Jones Hardware Co.....	Paints and glass.....	4 70
22.	A. G. Luken & Co.....	Paints and lead.....	55 60
23.	S. E. Smith, Med. Supt.....	Repair pay-roll.....	363 32
24.	Jones Hardware Co.....	Paints.....	30 41
25.	A. G. Luken & Co.....	Paints.....	91 73
26.	S. E. Smith, Med. Supt.....	Repair pay-roll.....	353 90

EXHIBIT 5—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
27.	Jones Hardware Co.	Paints and glass.	\$26 74
28.	A. G. Luken & Co.	Paints and oils.	61 24
29.	Schultz & Laning.	Repairing roofs.	163 80
30.	S. E. Smith, Med. Supt.	Repair pay-roll.	297 10
31.	A. G. Luken & Co.	Paints and oils.	59 13
32.	Schultz & Laning.	Repairing roofs.	74 25
33.	Charles Wagner.	Repairing roofs.	94 00
34.	S. E. Smith, Med. Supt.	Repair pay-roll.	325 12
35.	Schultz & Laning.	Repairing roofs.	34 20
36.	A. G. Luken & Co.	Paints.	40 90
37.	Charles Wagner.	Repairing roofs.	50 00
38.	S. E. Smith, Med. Supt.	Repair pay-roll.	358 88
39.	S. E. Smith, Med. Supt.	Repair pay-roll.	288 25
Total			\$5,497 17

EXHIBIT 6.

SHOWING CLASSIFIED EXPENDITURES ON ACCOUNT OF CLOTH-
ING FOR THE FISCAL YEAR (ELEVEN MONTHS)
ENDING SEPTEMBER 30, 1907.

Overalls	\$39 50	
Shawls	12 00	
Shirts and underwear.	531 77	
Clothing pay-roll	352 00	
Boots and shoes.	725 50	
Furnishings	266 32	
Dry goods	324 41	
Hose	85 88	
Men's suits	708 75	
Trousers	120 00	
Hats and caps.	31 50	
Current expense		\$3,197 63
Total	\$3,197 63	\$3,197 63

EXHIBIT 7.

LIST OF VOUCHERS SHOWING DISBURSEMENTS ON ACCOUNT OF
CLOTHING FOR THE FISCAL YEAR (ELEVEN MONTHS)
ENDING SEPTEMBER 30, 1907.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
1.	S. E. Smith, Med. Supt.	Clothing pay-roll	\$32 00
2.	Wm. H. Thomas & Co.	Underwear	17 50
3.	Adam H. Bartel Co.	Overalls and shawls	31 00
4.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
5.	Adam H. Bartel Co.	Clothing and furnishings	173 02
6.	Curme, Davis & Gray	Boots and shoes	384 50
7.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
8.	Adam H. Bartel Co.	Furnishings	75
9.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
10.	Wm. H. Thomas & Co.	Grommets	4 50
11.	Adam H. Bartel Co.	Dry goods and underwear	21 77
12.	Carson, Pirie, Scott & Co.	Dry goods	129 45
13.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
14.	Adam H. Bartel Co.	Underwear	25 60
15.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
16.	Chas. H. Feltman	Slippers	1 50
17.	Adam H. Bartel Co.	Furnishings	2 40
18.	Indiana Reformatory	Clothing	14 00
19.	Wm. H. Thomas & Co.	Clothing and dry goods	141 69
20.	Loehr & Klute	Clothing	154 00
21.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
22.	Pettis Dry Goods Co.	Dry goods	16 42
23.	Adam H. Bartel Co.	Hose and furnishings	204 05
24.	Chas. H. Feltman	Shoes	223 50
25.	Indiana Reformatory	Clothing	285 00
26.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
27.	Adam H. Bartel Co.	Umbrella	1 25
28.	Indiana Reformatory	Clothing	360 50
29.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
30.	Sol. Fox	Hat	1 50
31.	Carson, Pirie, Scott & Co.	White duck	16 66
32.	Dewenter & Co.	Straw hats	30 00
33.	Adam H. Bartel Co.	Clothing and furnishings	56 53
34.	Wm. H. Thomas & Co.	Underwear and slippers	165 48
35.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
36.	Chas. H. Feltman	Shoes	2 00
37.	Carson, Pirie, Scott & Co.	Dry goods	101 41
38.	Wm. H. Thomas & Co.	Shoes	114 00
39.	Adam H. Bartel Co.	Shirts and furnishings	141 40
40.	S. E. Smith, Med. Supt.	Clothing pay-roll	32 00
41.	Adam H. Bartel Co.	Furnishings	24 25
Total			\$3,197 63

EXHIBIT 8.

SHOWING CLASSIFIED EXPENDITURES FROM THE SPECIFIC
FUND FOR RAILWAY CROSSING FOR THE FISCAL
YEAR ENDING SEPTEMBER 30, 1907.

Appropriation		\$2,500 00
For right of way	\$163 10	
For cement and other construction.....	1,116 82	
Balance in treasury.....	1,220 08	
Total	\$2,500 00	\$2,500 00

LIST OF VOUCHERS SHOWING DISBURSEMENTS FROM THE SPE-
CIFIC FUND FOR RAILWAY CROSSING.

No.	To Whom Paid.	On Account of.	Amount.
1.	S. E. Smith	Right of way and legal proceedings	\$163 10
2.	S. E. Smith	Highway crossing	60 42
3.	Chas. E. Wagner.....	Excavating and concrete work	1,056 40
Total			\$1,279 92

EXHIBIT 9.

RECEIPTS FROM SALES COVERED INTO THE GENERAL FUND OF
THE STATE TREASURY DURING THE FISCAL YEAR (ELEVEN
MONTHS) ENDING SEPTEMBER 30, 1907.

Date.	Article.	To Whom Sold.	Amount.
1906.			
Nov. 1....	One calf hide	Henry Holzapfel.....	\$1 60
Nov. 10....	One calf hide	Henry Holzapfel.....	1 43
Dec. 11....	Two calf hides	Henry Holzapfel.....	3 00
Dec. 14....	One beef hide	Henry Holzapfel.....	6 30
1907.			
Jan. 4....	One old horse.....	John Decker.....	20 00
Jan. 5....	One beef hide.....	Henry Holzapfel.....	5 07
Jan. 5....	Two calf hides	Henry Holzapfel.....	4 00
Jan. 15....	One beef hide.....	Henry Holzapfel.....	6 48
Feb. 8....	One calf hide	Henry Holzapfel.....	1 70
Feb. 22....	One beef hide.....	Henry Holzapfel.....	6 00
April 6....	Old iron and rags.....	Henry Holzapfel.....	59 72
May 6....	One calf hide	Henry Holzapfel.....	1 50
June 5....	One bull calf.....	O. A. Stubbs.....	30 00
June 7....	Three calf hides	Henry Holzapfel.....	4 00
Aug. 15....	Two calf hides	Henry Holzapfel.....	1 52
Sept. 10....	Old iron, copper, rags and oil barrels.....	Henry Holzapfel.....	91 84
Sept. 16....	Old washing machine	Monarch Laundry	10 00
Sept. 24....	Two calf hides	Henry Holzapfel.....	2 16
Total....			\$256 32

EXHIBIT 10.

SUMMARY OF INVENTORY—SEPTEMBER 30, 1907.

Real Estate—

Land	\$35,434 50
Permanent improvements	709,919 54

Total	\$745,354 04
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Personal Property—

Offices	\$4,405 35
Dispensary	2,447 35
Laboratory	643 04
Officers' quarters	5,794 91
Storeroom	11,152 76
Department for Men.....	15,362 04
Department for Women.....	18,540 04
Dining halls	2,839 51
Assembly hall	1,355 57
Employes' quarters	4,234 93
General kitchen	2,709 05
Cold store	433 68
Bakery	266 61
Sewing-room	446 97
Laundry	6,474 46
Carpenter shop	2,548 96
Paint shop	400 30
Mortuary	36 10
Greenhouse	2,429 85
Live stock	3,517 75
Vehicles, harness and implements.....	2,019 30
Products and supplies on hand.....	3,733 59
Carriage house	2,144 40
Dairy	2,272 74
Farm cottage	288 45
Boiler house	7,567 40

Total	\$104,065 11
-------------	--------------

\$849,419 15

EXHIBIT 11.

CLOTHING ACCOUNTS BY COUNTIES FOR THE FISCAL YEAR END- ING SEPTEMBER 30, 1907.

Adams	\$195 60
Allen	708 70
Blackford	39 90
Decatur	207 75
Delaware	328 80
Fayette	88 75
Franklin	239 70
Grant	281 15
Hancock	5 05
Henry	163 55
Jay	202 15
Madison	418 45
Randolph	151 55
Rush	189 70
Union	74 60
Wayne	271 45
Wells	202 20
<hr/>	
Total	\$3,769 05

EXHIBIT 12.

REPORT OF THE SEWING ROOM, FISCAL YEAR ENDING SEPTEMBER 30, 1907.

	<i>Made.</i>	<i>Re-paired.</i>
Aprons	334	47
Awnings	35	24
Bags, laundry	4	5
Bibs	20	....
Broom covers .....	....	14
Caps, nurses'	155	....
Chemises	44	....
Coats .....	....	98
Combination suits	45	19
Curtains	152	27
Curtain loops	218	....
Cushions	21	6
Cushion covers	36	7
Drawers, men's	6	23
Drawers, women's	115	....
Dresses	316	207
Dresser scarfs	9	....
Dusting cloths	81	....
Mattress ticks	53	....
Meat covers	3	6
Napkins	445	....
Night gowns	77	....
Night shirts	36	2
Overcoats .....	....	12
Pillow cases	456	12
Pillow ticks	4	2
Rest sheets .....	....	11
Restraint waists	5	30
Rugs .....	....	3
Sash curtains	43	3
Sheets	514	....
Shirts	2	5
Shirt waists	3	....
Sleeves .....	....	66
Strainer cloths	34	....
Sun-bonnets	21	....
Table cloths	111	12
Table felts .....	....	2
Towels	1,272	102
Trousers	3	409
Underskirts	67	29
Underwaists	43	....
Vests .....	....	7
Window shades	57	5

EXHIBIT 13.

PRODUCTS OF FARM AND GARDEN FOR THE FISCAL YEAR END-
ING SEPTEMBER 30, 1907.

Pork, dressed, pounds.....	25,097
Veal, dressed, pounds.....	1,107
Beef, dressed, pounds.....	2,383
Turkeys, dressed, pounds.....	110
Young chickens, dressed, pounds.....	510
Lettuce, pounds	5,839
Sage, pounds	100
Rhubarb, bunches	6,736
Young onions, bunches.....	33,133
Herbs, bunches	62
Asparagus, bunches	1,101
Radishes, bunches	35,943
Carrots, bunches	68
Beets, bunches	86
Spinach, bushels	165
Peas, bushels	41
Beets, bushels	326
Green beans, bushels.....	767
Carrots, bushels	15
Potatoes, bushels	473
Apples, bushels	21
Onions, bushels	436
Chilli-peppers, bushels	2
Sweet potatoes, bushels	136
Turnips, bushels	1,202
Parsnips, bushels	101
Oats, bushels	430
Rye, bushels	10
Corn, bushels	425
Tomatoes, bushels	217
Onion sets, bushels	120
Cucumber pickles, barrels	10
Sauer kraut, barrels	50
Cabbage, barrels	485
Strawberries, quarts	1,177
Currants, quarts	125
Raspberries, quarts	1,413
Lima beans, quarts	674
Eggs, dozens	880
Mango peppers, dozens.....	30
Green corn, dozens	4,087
Cucumbers, large, dozens.....	140
Cucumbers, small, dozens	560

EXHIBIT 13—Continued.

Celery, dozens	362
Cauliflower, heads	273
Cabbage, heads	111
Corn fodder, shocks.....	500
Clover hay, tons.....	22
Alfalfa hay, tons.....	52
Oats straw, tons.....	12
Ensilage, tons	240
Milk, gallons	22,121

EXHIBIT 14.

STATISTICAL STATEMENT, FISCAL YEAR 1906-7 (ELEVEN MONTHS).

Population.

	<i>Men.</i>	<i>Women.</i>	<i>Total.</i>
Number enrolled October 31, 1906.....	359	392	751
Number received during year.....	49	68	117
Number discharged or died during year.....	45	71	116
Number remaining September 30, 1907.....	363	389	752
Daily average number present	351.2	378.9	730.1
Average number of officers and employes.....	....	....	153.6

Expenditures.

Current expenses—

1. Salaries and wages.....\$44,561 18
2. Clothing
3. Subsistence
4. Ordinary repairs
5. Office, domestic and outdoor expenses.....

Total	\$118,222 41
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Extraordinary Expenses—

1. New buildings
2. Permanent improvements to existing build-
ings

Total	\$1,279 92
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Grand total	\$119,502 33
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I certify that the foregoing fiscal tables are correct transcripts.

JOHN P. THISTLEWAITE,
Steward.

Report of the
Trustees and Medical Superintendent

OF THE

Northern
Indiana Hospital for Insane

AT LONGCLIFF, NEAR LOGANSPORT

FOR THE

YEAR ENDING SEPTEMBER 30, 1907
(Nineteenth Year)

To the Governor



INDIANAPOLIS

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING
1907

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
November 29, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, December 6, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

December 6, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, December 6, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer December 6, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

NORTHERN INDIANA HOSPITAL FOR INSANE.

1907.

CHARLES W. SLICK, President, Mishawaka.
HENRY A. BARNHART, Vice-President, Rochester.
WARREN T. McCRAY, Treasurer, Kentland.
WM. A. MORRIS, Secretary, Frankfort.

Medical Superintendent.

JOSEPH G. ROGERS. Ph. D., M. D.

Senior Assistant Physician.

FREDERICK W. TERFLINGER, M. D.

Assistant Physicians.

MAX C. HAWLEY, M. D.
GEORGE E. HOFFMAN, M. D.
EARL PALMER, M. D.

Steward.

ANDREW W. GAMBLE.

Assistant Steward.

JOHN WOLF.

Clerk.

ELMER E. WORSTELL.

Assistant Clerk.

ABBY G. HOWE.

REPORT OF BOARD OF TRUSTEES.

HON. J. FRANK HANLY, *Governor of Indiana*:

Sir—Pursuant to an act of the general assembly, approved March 2, 1907, the Board of Trustees of the Northern Indiana Hospital for Insane respectfully submits the following report, together with that of the Medical Superintendent, with the accompanying financial and statistical tables, for the fiscal year ending September 30, 1907. In accordance with the same act, Mr. Wm. A. Morris, of Frankfort, following your appointment, qualified and became an additional member of the Board on May 14, 1907. Thereupon, in further pursuance of the statute, the Board reorganized by the election of Charles W. Slick, president; Henry A. Barnhart, vice-president; Warren T. McCray, treasurer; and Wm. A. Morris, secretary, the first named having been reappointed by you to serve for another period of three years from January 1. Otherwise the personnel of the Board has remained unchanged, and, almost without exception, all members have been present at all regular meetings. The details of operations and conditions, improvements, etc., are set forth in the Superintendent's report and the appended tables, to which you are respectfully referred.

The most important progression of the year has been the completion and opening for use of two additional buildings, which have increased the capacity of the institution 150 beds. It now has room for 1,000 patients, not considering the tent, which it is intended to maintain. This has a capacity of 30 beds. As a consequence, the management has been able to accept and admit all insane persons in the northern district for insane, properly admissible under existing law. The cost of this improvement has been \$80,000.00, appropriated by the general assembly, and \$6,164.50 allowed by you, from the Governor's Emergency

Contingent Fund. The call for additional funds was made absolutely necessary by the unexpected and extraordinary rise in the cost of labor, both skilled and unskilled, since the original estimates were made in the autumn of 1904, but particularly during the current year.

Work is in progress under contracts, secured competitively, for the extension of the refrigerating apparatus so that three tons of ice may be made daily and so that refrigerating facilities may be furnished the administration and general kitchens; and for a water-softening apparatus to furnish 5,000 gallons, per hour, of soft water for boilers, laundry and domestic uses. The latter will be in full operation before the close of the calendar year, the former as soon as needed to meet the requirements of the coming summer. Appropriations are available for these improvements, \$4,000.00 for refrigeration, \$4,500.00 for water softening. Appropriations have also been made for alterations in wards E and 5, looking to a subdivision and more daylight, and for a new root house. These improvements will be carried out next summer.

The funds appropriated for maintenance, clothing and repair have been sufficient to meet reasonable requirements, a small surplus, \$1,985.88, having been turned back into the general fund. Many minor improvements have been made in all parts of the hospital, and its equipment has been kept in a good state of repair. The subsistence has been good and plentiful. Means are provided to facilitate complaints from every member of the hospital population in this particular. Very few have been made. Most of these were insignificant and corrective attention was promptly given where required. Clothing is furnished by the State to about one-third of the inmates. This is of good quality and looks as well as can be expected considering the personal habits of many of the wearers. In view of the general rise of wages it has been found necessary to make some increase in pay of employes in order to hold the service of such as are desirable. This course has been found to be an economical procedure, because a good employe is never wasteful, and will help reduce the total number required. This hos-

pital still has its needs, heretofore noted but still unmet by necessary special appropriations; detailed mention, however, will be postponed to a future report. The organization and methods of the institution are satisfactory to this Board; and the results of the management and direction of the Medical Superintendent and staff have in our judgment been of a sort not only to maintain the good record of past years, but giving evidence of vigorous progress.

Very respectfully,

CHAS. W. SLICK,

November 25, 1907.

President.

REPORT OF MEDICAL SUPERINTENDENT.

The Honorable Board of Trustees:

Gentlemen—Pursuant to the statute approved March 2, 1907, I have the honor to report the operations of the Northern Indiana Hospital for Insane for the fiscal year ending September 30, 1907.

MEDICAL HISTORY.

MOVEMENT OF POPULATION.

Fiscal Year Ending September 30, 1907.

Movement.	Men.	Women.	Total.
Enrolled November 1, 1906.....	482	453	935
Admitted	95	85	180
Discharged	43	31	74
Recovered	18	16	34
Improved	19	12	31
Unimproved	4	2	6
Not insane	2	1	3
Died	40	32	72
Furloughed September 30.....	42	59	101
Average actually resident.....	448.823	410.230	859.053
Enrolled September 30, 1907.....	494	475	969

Further details of movement and general medical statistics are set forth in an appendix. A summary of these tables is as follows:

Psychoses of Admitted. During the past year there were admitted 180 patients. Of these, 25 (13 per cent.) were cases of acute mania; of chronic mania there were 3 (less than 2 per cent.); of epileptical mania, 1; of melancholia, 70 (38 per cent.); primary dementia, 2; secondary dementia, 3 (less than 2 per cent.); senile dementia, 13 (7 per cent.); epileptic dementia, 2; paretic dementia, 23 (13 per cent.); paralytic dementia, 1; paranoia, 12 (7 per cent.); katatonia, 4 (less than 2 per cent.); epilepsy, 2; dementia praecox, 13 (7 per cent.); imbecility, 3; neurasthenia, traumatic insanity and not insane, each, one.

Psychoses of Recovered. During the year 34 (11 per cent of admitted) were discharged recovered. There were 11 recoveries from acute mania (44 per cent. of the number of this class admitted); of chronic mania, 3 recoveries and 3 admissions; and of melancholia, 20 recoveries and 70 admissions (28.5 per cent.).

Duration of Recovered Cases. The recoveries from acute mania were distributed over a period of from four to eighteen months; in chronic mania from one to five years; and in melancholia from six month to five years. Recurrence may be expected in the cases of chronic mania.

Mortality. The number under care was 1,054, the mortality 72 (6.8 per cent.). Deaths were assignable to psychoses as follows: Acute mania, 4; chronic mania, 7; epileptic mania, 2; epileptic dementia, 2; primary dementia, 1; secondary dementia, 2; dementia praecox, 1; senile dementia, 9; parietic dementia, 20; progressive chorea, 1; melancholia, 19; paralytic dementia, 3; katatonia, 1.

The Complications and Causes of Death were as follows: Pulmonary tuberculosis, 9; organic heart disease, 3; exhaustion, 4; cerebral apoplexy, 8; general paresis, 15; laryngeal tumor, 1; dysentery, 2; pulmonary hemorrhage, 2; pulmonary odema, 2; inanition, 5; uremia, 3; pneumonia, 5; leptomeningitis, 1; nephritis, 6; hemorrhage from ulcer of femoral vein, 1; choreic exhaustion, 1; cardiac thrombus, 1; status epilepticus, 1; peptic ulcer, 1; peritonitis, 1.

No malady has prevailed endemically, of any sort. Malarial manifestations have been entirely absent, notwithstanding an unusually rainy summer. This immunity is unquestionably due to the researches and preventive work begun five years ago and kept up to date. The malaria-bearing mosquito was plentiful here then and intermittent and remittent fevers were common. Breeding places for these insects were abolished as fast and as far as possible and those remaining on the ground were kept out of the houses by screens, this protection being extended yearly. It is the intention to so protect all the sleeping quarters in the hospital. The policy of providing as much outdoor life as possible has been continued; sunlight and fresh air, when

the weather has permitted, have been secured for all inmates, and particularly those who, in the summer previous, reacted to the tuberculin test, even in the slightest degree; and it is the intention to maintain the tent, in use for four years past, simply as a means of increasing general capacity, for the purpose of accommodating this class. But two only of the incipient cases detected by the test of 1906 have become fully developed and passed to a fatal issue.

In the line of surgical work, during the year, seven abdominal sections have been required, all of which were followed by satisfactory results. Four of these cases were on account of abnormal conditions of the pelvic organs, three, of the gall-bladder. These operations were done by Dr. Terflinger of the department for women. Several minor operations were necessary in both departments of the hospital of various sorts. Two fractures of the hip, one of the jaw, and two Colles fractures also required attention.

A very remarkable case of traumatic insanity was admitted, without history of injury, manifesting complete absence of perceptive functions, but showing evidence of serious physical discomfort, with special reference to respiration. A careful examination developed a fracture of the fifth rib, left side, with extreme displacement of fragments. Adjustment was made and immobility secured by adhesive strapping. The patient went to sleep for eight hours and woke up without pain, and with the mental faculties restored. Subsequently the patient furnished the history of a blow on the chest, from a friend, at a church social, which gave him severe pain for a time. Two weeks later he was found unconscious at a place where he had been chopping wood. A month later he was admitted to the hospital, without change of condition. After probation of a month he was discharged and has continued to do well since. The rational inference is that there was injury to the rib near the edge of the scapula by contre coup, which became a complete fracture later, during the violent exertion of wood chopping. Any explanation of the remarkable association of physical and mental symptoms would perhaps be guess work.

Hospital Staff. Dr. Adele R. Emerson resigned January 28, 1907, to return to Boston. Dr. Earl Palmer (M. D., Rush Medical College) was engaged and assigned as junior assistant physician February 18, and on June 1 was promoted to be assistant physician and assigned to a division in the department for women.

No other changes have occurred either in the medical or clerical staff. Special duties outside of purely professional work are assigned to each of the medical assistants; and Dr. F. W. Terflinger, senior assistant, renders special aid to the Superintendent in general supervision of all departments.

The Training School for Nurses continues to be maintained as in past years. Attendance is obligatory for all not graduates. Notwithstanding this rule, a reasonable degree of interest is manifested, and results justify the efforts made by the medical staff in the course of instruction.

SPECIAL IMPROVEMENTS.

Water Softener. For softening water in laundry, boiler house and elsewhere, an appropriation of \$4,500 was made by the general assembly, of 1907, pursuant to estimates and specifications set forth in my report of 1906. Competitive bids to provide the needed apparatus were asked for early in this year. The following were specially considered: The Kennicott Water Softening Company, of Chicago; The Dodge Manufacturing Company, of Mishawaka; each for apparatus with capacity to soften 5,000 gallons per hour and storage tank on tower, to contain 5,000 gallons, with piping and connections. Very full investigation of these and other systems was made during the summer, and in August a contract was made with the Kennicott Company for a type B machine, with device for mixing chemicals on the ground floor of the adjacent power house. The cost of desalification is guaranteed to be not more than $1\frac{1}{4}$ cents per 1,000 gallons. This work is to be completed and in operation in ten weeks from date of contract. The foundation has been put in place.

Extension of Refrigerating System. To provide a small plant with capacity to produce three tons of ice daily, an appropriation of \$4,000 will be available October 1, 1907. This covers also an extension of the present brine pipe system to the Administration and general kitchens. For the accommodation of a part of the apparatus, a building 20x-24x12 feet high has been designed and built, conveniently near to the original installation for refrigeration, put up four years ago. This is a neat and substantial brick structure with stone foundation and metal roof. It will contain the brine tank, with 100 freezing cans, a distilled water cooler, the ice dump and other ice-handling devices and a storage room for ice. An auxiliary pump will be placed nearby, in the boiler house, for brine circulation.

This house was built under a contract with James I. Barnes, of Logansport, he being the lowest of four bidders as follows:

George H. Baker.....	\$725 00
James I. Barnes.....	711 00
Harry A. Barnes.....	772 00
A. S. Boyer.....	854 30

The insulation and partition work is to be put in by the hospital. For this purpose cypress lumber, hair felt and pitch will be used. Stephenson, insulated, air-tight doors are to be also supplied. The ice-making machinery proper will be placed by the Vogt Machine Company, of Louisville, Ky., immediately, as an addition to the original refrigerating apparatus, at a cost of \$1,700. The brine pipe extension to the kitchen will be placed next year.

The building of the new root house and the alterations of wards E and 5, for which appropriations are just now available, will be made during the coming summer.

Additional Capacity. The two buildings commenced in the spring of 1906, intended to accommodate 140 additional patients, have been completed. That for women was opened and put in operation October 4; that for men, November 5. As a consequence the long-enduring lockout has been raised; acceptances have been issued for all waiting cases; and there is nothing now to prevent the prompt admission

to hospital of all new cases of insanity in the northern district for insane.

Some description of these buildings was given in my report of 1906, but it may be well to give here some additional details.

The building for women contains two wards for middle-class patients. The two stories are alike in arrangement and equipment, each constituting a ward with its accessories. The main entrance opens into a commodious vestibule. From this, slate stairs lead to the ward above and to the basement below, shut off by doors. Two other doors lead into the lower ward, one directly into a large day-room, well lighted on three sides, provided with a massive brick fireplace, but actually heated by an ample number of direct-indirect radiators, all having immediate communication with the outer air. A handsome, full sized, iron grille takes the place of a partition wall between this and an adjacent dining-room, with scullery attached, having an external entrance with small lobby for convenience in delivering supplies. A convenient nurse's room is located on each side of the day-room. The water closets are in a detached tower reached by passing through a tile-floored loggia, glazed in winter, open in summer. A hall on the east side, with bedrooms of various sizes on each side, five of which are heated by indirect radiation, leads into a dormitory, lighted on three sides, containing fifteen beds. Another hall, on the south side of the day-room, leads to the lavatory and bath-room, the clothing-room and a dormitory for six beds. This ward accommodates thirty-eight patients and four attendants. The ward above is similar in all particulars. The cement-hardened, plastered walls are painted, three coats, in a rose-buff tint, in the important interiors; a very pale green in the dormitories. Lavatories, closets and bath rooms have white enameled brick facings. The ceilings, of embossed steel, in handsome patterns, are finished in a flat white. All the interior wood finish, as well as most of the furniture, is of beautifully grained ash, artificially stained and varnished. All floors are of narrow sugar maple, excepting sculleries, closets, lavatories, bath rooms and vesti-

bules, which have tiled floors, of pleasing patterns. Radiators, grilles and other interior iron work are finished in Bower-Barf black. Every room is abundantly lighted from the ceiling. In the larger rooms the lights are in groups, backed by mirror reflectors. All lights are controlled by flush, lock switches, one for each bedroom, located in the corridor, outside the room. These switches are of special design and can not be manipulated by any means other than their own socket keys. The wiring is strictly according to the latest underwriters' rules, no more than twelve lamps on any branch line. All branches lead from slate panel boards, centrally located, in a locked closet, in the day-room. This contains the switches and safety fuses belonging to each group of lights. The whole system of wiring is run in flexible steel conduits built into the walls and ceilings during construction. Hot and cold water are laid on to all fixtures from central sources at the power house, through underground pipes. The hot water pipe rests on iron rollers supported at intervals inside an 8-inch earthenware pipe filled with asbestos sponge. The outlook from this building is varied and agreeable in all directions, its elevated location giving it a special advantage in this particular. All windows are protected by quadrant wire guards, of the Longcliff pattern, and metallic insect screens.

The building for men is intended to provide a special home for the working inmates of the chronic class, convenient to the location of their several occupations, at the same time affording facilities for close surveillance and general care. The congregation of this class in such a home promises some of the advantages of the colony system, such as independent regulation of subsistence, domestic management and general direction at all times in work, in rest, and recreation. It is designed for use as an ordinary dwelling, dormitories on the second floor and rooms for day use below. In details of construction it is similar to the building for women, already described, but it differs from the latter in that one vast dormitory accommodates the beds of all the inmates, with single and double rooms for the numerous employes who are associated with them in their daily

occupations and for the attendants who have charge of the domestic work of the establishment. The building is ell-shaped. The smaller wing contains an ample dining-room, kitchen and scullery, with domestic quarters above and a commodious slate stairway. There is an entrance hall with a room on each side, where shoes and working clothes may be exchanged. From this opens a large day-room with a massive brick mantel and fireplace. Adjoining this is an ample lavatory on one side, and, on the other, a tiled loggia, open in summer, glazed in winter, leading to a detached, square tower, containing water closets above and below. Leading out from one side of the day-room is a corridor giving access to various small rooms for attendants and employes and also to a clothing room of ample size and equipment for seventy inmates. A passage on the side leads through a loggia like the before mentioned, to a detached bath house, containing an ante-room and bath-room, equipped with two immersion and three shower baths, furnished with hot and cold water through a mixer with thermometer attachment. This bath house has a door for entrance from the outside, for the convenience of non-colonists. The second story is occupied by a very large dormitory with a number of smaller rooms for inmates and employes. This story is also provided with the usual accessory rooms of a large household. Fresh air and plenty of it is secured by the system of heating and ventilation used, winter and summer. It is intended that this is to be the home of almost seventy chronic, custodial cases and their guardians and directors. All of these will be engaged, during work days, together and will sleep under the same roof at night. They will have the hours usual in the farm home, early to bed and early to rise; breakfast at 6 o'clock, dinner at noon sharp, supper at 5:30 p. m., and to bed at 8. The night watch will take care of their wants and doings during the night hours. A man of experience will preside over this home, and his wife will carry out the details of work in the kitchen and dining-room, with the necessary assistants of both sexes, some employed, some inmates. This establishment will be largely independent of the hospital proper.

Freedom will be allowed within judicious limit and its motto will be: "Lavori bonor maximus."

The cost of these new buildings was defrayed from the legislative appropriation of 1905 (\$80,000.00) and from the Governor's Emergency Contingent Fund (\$6,164.50), total \$86,164.50. A careful estimate made in the fall of 1904 indicated that the amount asked for and appropriated by the legislature, \$80,000.00, was ample for the construction and equipment. In the midst of the work, in the fall of 1906, at the time of the visit of the legislative committee considering the institution needs, there was no reason to suspect the insufficiency of the estimates, and, consequently, no additional sum was asked for; but, commencing in January of 1907, there was an unusual and progressive rise in the cost of labor, both skilled and ordinary, to such an extent that it became necessary for your Honorable Board, on June 13, 1907, to ask the Governor for an additional allowance from his Emergency Contingent Fund, and in the meantime all work was suspended and the workmen discharged. After careful deliberation, in view of the great and urgent need for additional accommodation, there being at that time a large number of insane persons in the northern district for insane awaiting admission to hospital, many of whom were confined in jails, the Governor, on July 23, 1907, gave notice of his consent that the fund mentioned could be drawn upon to the extent of \$8,000.00. The next day work was resumed and pushed forward with all possible vigor to completion, with the close of the fiscal year, September 30. All of the amount allowed by the Governor was not used, for the reason that much of the inside painting of the building for men, on walls, could not be done this season on account of dampness still remaining therein. Material for this work was secured, however, and it is expected to complete it next summer, this work to be done by the hospital force. Details of disbursement are shown in the appendix of this report.

Occupation and Amusement have continued to maintain a front rank among measures remedial as to functional mental disorders and palliative and cheering in all sorts of

cases. In addition to the encouragement of light, indoor amusements and games, ward concerts and dances, social visiting and so forth, indoor industries, particularly among the women, have been fostered as much as possible. In this direction raffia basket-work has taken the lead, one patient declaring it to be the means which led to her recovery. Daily walks over established routes are taken by all patients as far as able and outdoor life is encouraged to the extremest possible extent when the weather permits. During the summer, weekly games of baseball were enthusiastically enjoyed. All wards are now furnished with book-cases filled with neat volumes, including much that is copyrighted and recent, within reach of all; and the reading of good books continues to grow. Scattered through the eleven months of the fiscal year just closed opportunity was afforded to give a number of entertainments of a notable sort, some of these by volunteers, but most of them paid for. Thanks are especially due the former and are hereby tendered. This series included several plays, many picture shows, two band concerts and Wallace's circus, attended by 363 patients, who went and came on a special train on the Vandalia railroad. Thanks are due particularly to various friends of the institution for large contributions of magazines and other literature. Numerous copies of the cheaper class are distributed through the wards monthly. A number of weekly newspapers are regularly received.

In conclusion, I desire to gratefully acknowledge the loyal and generally efficient co-operation of officers and employes and the considerate support of your Honorable Board.

Very respectfully,

J. G. ROGERS,
Medical Superintendent.

Journal of Management Education 30(6)p.789-804

APPENDIX.

MEDICAL TABLES

WITH

Report of Medical Superintendent

OF THE

NORTHERN INDIANA HOSPITAL FOR INSANE,

1907.

TABLE II.

Duration and Psychoses of Recovered, Fiscal-Year 1906-7.

DURATION.	ACUTE MANIA.			CHRONIC MANIA.			MELAN-CHOLIA.			(TOTALS.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
Under four months.....	2		2							2		2
Under six months.....							2	1	3	2	1	3
Under twelve months.....	4	3	7		2	2	1	2	3	5	7	12
Under eighteen months.....	2		2					3	3	2	3	5
Under twenty-four months.....							3	2	3	3		3
Under three years.....								2	2	2	2	2
Under five years.....					1	1		2	2	2	1	3
Under seventeen years.....							2	2	4	2	2	4
Totals.....	8	3	11		3	3	10	10	20	18	16	34

TABLE III.

Approximate Ages of Recovery.

FISCAL YEAR 1906-7.

Ages—	Men.	Women.	Total.
Between ten and twenty years.....	1	0	1
Between twenty and thirty years.....	4	3	7
Between thirty and forty years.....	6	6	12
Between forty and fifty years.....	3	2	5
Between fifty and sixty years.....	1	2	3
Between sixty and seventy years.....	2	2	4
Between seventy and eighty years.....	1	1	2
Totals	18	16	34

TABLE V.

Approximate Ages of Those Who Died.

FISCAL YEAR 1906-7.

Ages—	Men.	Women.	Total.
Between twenty and thirty years.....	1	4	5
Between thirty and forty years.....	6	5	11
Between forty and fifty years.....	14	6	20
Between fifty and sixty years.....	10	10	20
Between sixty and seventy years.....	4	3	7
Between seventy and eighty years.....	5	4	9
Totals	40	32	72

TABLE VI.

Psychoses of Admitted.

FISCAL YEAR 1906-7.

Psychoses—	Men.	Women.	Total.
Acute mania	10	15	25
Chronic mania	2	1	3
Epileptic mania	0	1	1
Melancholia	26	44	70
Primary dementia	1	1	2
Secondary dementia	0	3	3
Senile dementia	9	4	13
Epileptic dementia	0	2	2
Paretic dementia	16	7	23
Paralytic dementia	0	1	1
Paranoia	8	4	12
Katatonía	4	0	4
Epilepsy	2	0	2
Dementia praecox	12	1	13
Imbecility	3	0	3
Neurasthenia	0	1	1
Traumatic insanity	1	0	1
Not insane	1	0	1
Total	95	85	180

TABLE VII.

Duration of Psychoses of Admitted.

FISCAL YEAR 1906-7.

Duration—	Men.	Women.	Total.
Two months or less.....	20	21	41
Three months or less.....	8	5	13
Six months or less.....	14	11	25
One year	18	13	31
Two years	8	8	16
Three years	3	6	9
Four years	4	3	7
Five years	2	3	5
Six years	1	1	2
Seven years .....	..	3	3
Eight years	2	1	3
Nine years	2	1	3
Ten years .....	..	2	2
Ten to fifteen years.....	5	1	6
Twenty to twenty-five years	2	..	2
Unknown	6	6	12
Totals	95	85	180

TABLE VIII.

Number of Admissions to Any Hospital of Admitted.

FISCAL YEAR 1906-7.

Number of Admissions—	Men.	Women.	Total.
First admission	78	72	150
Second admission	15	12	27
Third admission	2	1	3
Totals	95	85	180

TABLE IX.

Civil Condition of Admitted.

FISCAL YEAR 1906-7.

Duration—	Men.	Women.	Total.
Single	44	20	64
Married	46	49	95
Widowers	4	..	4
Widows .....	..	14	14
Divorced .....	..	1	1
Unknown	1	1	2
Totals	95	85	180

TABLE X.

Clothing Supply of Admitted.

FISCAL YEAR 1906-7.

Source of Supply	Men.	Women.	Total.
County	34	15	49
Friends	61	70	131
Total	95	85	180

TABLE XI.

Occupation of Admitted.

FISCAL YEAR 1906-7.

Occupation—	Men.	Women.	Total.
Barber	1	..	1
Baker	1	..	1
Bootblack	1	..	1
Blacksmith	2	..	2
Brakeman	1	..	1
Bridge inspector	1	..	1
Commercial traveler	1	..	1
Clerk	1	..	1
Civil engineer	1	..	1
Chair maker	1	..	1
Domestic .....	..	4	4
Electrician	1	..	1
Engine driver	2	..	2
Farmer	30	..	30
Farmer's wife .....	..	13	13
Forelady in factory .....	..	1	1
Gardener	2	..	2
Horse trader	1	..	1
Housewife .....	..	29	29
Housekeeper .....	..	14	14
Hotel keeper .....	..	1	1
Laborer	23	..	23
Liveryman	1	..	1
Merchant	2	..	2
Merchant's wife .....	..	1	1
Metallurgist	1	..	1
Milliner .....	..	1	1
Mason's wife .....	..	1	1
None	8	7	15
Printer	1	..	1

Occupation—	Men.	Women.	Total.
Painter	1	..	1
Plumber	2	..	2
Physician	1	..	1
Student	1	..	1
Scavenger	1	..	1
Seamstress .....	..	1	1
Telegraph operator	1	..	1
Telephone operator .....	..	1	1
Teamster's wife .....	..	1	1
Wood worker	1	..	1
Waitress .....	..	1	1
Unknown	3	10	13
Totals	94	86	180

TABLE XII.

Nativity of Admitted.

FISCAL YEAR 1906-7.

State or Country—	Men.	Women.	Total.
Arkansas .....	..	1	1
Indiana	62	55	117
Illinois	3	2	5
Iowa	2	..	2
Kansas	1	..	1
Kentucky	1	1	2
Michigan	1	3	4
Mississippi .....	..	1	1
New York	4	2	6
Ohio	7	10	17
Pennsylvania	7	..	7
West Virginia	1	..	1
Wisconsin .....	..	1	1
Denmark .....	..	1	1
England	2	1	3
Greece	1	..	1
Germany	2	3	5
Russia	1	..	1
Unknown .....	..	4	4
Totals	95	85	180

TABLE XIII.

Admission by Counties.

FISCAL YEAR 1906-7.

Counties—	Men.	Women.	Total.
Cass	7	5	12
Dekalb	2	1	3
Elkhart	8	13	21
Fulton	1	1	2
Huntington	6	2	8
Jasper .....	..	3	3
Kosciusko	4	8	12
Lagrange	4	1	5
Lake	9	3	12
Laporte	5	8	13
Marshall	9	4	13
Miami	3	6	9
Newton	1	2	3
Noble	3	3	6
Porter	1	3	4
Pulaski .....	..	2	2
St. Joseph	13	7	20
Starke	1	1	2
Steuben	4	3	7
Wabash	6	5	11
White	5	2	7
Whitley	3	2	5
Totals	95	85	180

TABLE XIV.

Admission by Counties from July, 1888, the Beginning.

Cass	395
Dekalb	155
Elkhart	330
Fulton	124
Huntington	184
Jasper	186
Kosciusko	204
Lagrange	74
Lake	165
Laporte	334
Marshall	184
Miami	226

Newton	67
Noble	146
Porter	143
Pulaski	69
St. Joseph	331
Starke	72
Steuben	130
Wabash	176
White	119
Whitley	99
Other counties	307

Total	4,121
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FISCAL TABLES

WITH

Report of Medical Superintendent

OF THE

NORTHERN INDIANA HOSPITAL FOR INSANE,

1907.

EXHIBIT No. 1.

Summary of Inventories.

FISCAL YEAR 1906-7.

Equipment.

General office	\$2,199 94
Laboratory	2,461 20
Medical office	872 72
Medical library	2,036 66
Miscellaneous library	1,010 00
Reception room and hall.....	785 29
Dispensary	1,076 22
Officers' quarters	4,680 08
Administration kitchen	726 43
General kitchen	3,102 12
Central dining hall	1,796 62
Employees' dining hall.....	896 49
Employees' quarters	2,769 95
Bakery	686 42
Supplies in store.....	9,628 11
Store furniture	669 36
Farm and garden products.....	2,208 22
Provender in barn.....	1,993 50
Sewing room	445 16
Assembly hall	2,729 54
Orchestra equipment	180 80
Laundry	3,273 40
Mortuary	140 67
Wards	45,519 23
Engineer's stock and tools.....	2,652 24
Florist's stock and tools.....	3,717 49
Carpenter's stock and tools.....	626 43
Painter's stock and tools.....	842 18
Dairy, stock and tools.....	4,368 87
Stable, stock and tools.....	2,909 76
Farm and garden, stock and tools.....	3,581 88
Fire apparatus	442 25
Meat room	167 73
Milk room	288 56
Shoe shop	50 00
<hr/>	
Total	\$111,535 52

Real Estate.

Land and improvement on land other than buildings.....	\$51,524 56
Buildings	676,174 77
<hr/>	
Total	\$727,699 33

EXHIBIT No. 1—Continued.

Summary.

Land and buildings	\$727,699 33
Equipment	111,535 52
Total	<u>\$839,234 85</u>

EXHIBIT No. 2.

FINANCIAL STATEMENT.

The following is a statement of the receipts and expenditures for the fiscal year ending September 30, 1907:

Receipts.

Maintenance, fixed	\$135,000 00	
Less one-twelfth on account of change in fiscal year	11,250 00	\$123,750 00
For excess over 834 inmates.....		4,119 19
Clothing	6,000 00	
Less one-twelfth on account of change in fiscal year	500 00	5,500 00
Repairs	7,500 00	
Less one-twelfth on account of change in fiscal year	625 00	6,875 00
Specific—For fiscal year ending September 30, 1907:		
Buildings, 1906-1907.....		<u>46,164 50</u>
Total receipts for fiscal year ending September 30, 1907.....		\$186,408 69

Expenditures.

Maintenance—	
Salaries and wages.....	\$52,685 79
Fresh meats	12,722 30
Cured meats	3,364 31
Breadstuffs	4,386 86
Cereals and legumes.....	1,224 39
Tea and coffee.....	1,969 15
Sugar and sirup.....	2,996 16
Vinegar and condiments.....	426 97
Butter and cheese.....	4,975 28
Eggs	2,716 38
Vegetables	1,472 95
Fruits	3,258 62
Tobacco	954 58
Bedding	<u>2,920 86</u>

EXHIBIT No. 2—Continued.

Furniture	\$1,231 78
House furnishings	237 35
Tinware and kitchen equipment.....	502 56
Tableware	706 48
Housekeeping supplies	1,947 77
Coal oil and gasoline.....	194 92
Coal	11,426 29
Lubricants	470 25
Medicine and drugs.....	1,138 35
Druggist sundries	269 70
Pathological and surgical supplies.....	251 56
Cleaning material	975 40
Expressage and telegrams.....	233 43
Postage	320 98
Chaplain	140 00
Amusements	386 55
Advertising	103 63
Newspapers and periodicals.....	86 80
Books	185 49
Blank books, stationery and printing.....	687 19
Traveling expenses	209 73
Tools and implements	745 38
Undertaking	40 00
Laundry supplies	1,761 29
Ice	273 57
Stable provender	1,150 93
Dairy	2,110 97
Vehicles and harness.....	225 00
Live stock	425 00
Horseshoeing	171 70
Trees, plants and shrubbery.....	199 61
Insurance	200 00
Glass	53 56
Sewers and drains.....	81
Special labor	175 75
Tent ward	21 09
Steam and water fittings.....	180 31
Hardware	328 31
Painters' supplies	228 35
Electrical supplies	63 30
Lumber	107 71
Balance to general fund.....	1,625 74
Total	\$127,869 19
Clothing—	
Wages	\$877 14
Coats	646 85
Vests	71 85
Trousers	823 80

EXHIBIT No. 2—Continued.

Women's hats	\$30 50
Sun bonnets	16 09
Undershirts	52 14
Undervests	76 23
Men's drawers	136 14
Men's hose	123 12
Women's hose	98 68
Men's shoes	396 77
Women's shoes	29 29
Gloves	5 00
Fans	2 65
Heavy shirts	255 12
Suspenders	40 26
Percale	226 69
Prints	16 04
Shirting	121 20
Duck	217 76
Light muslin	92 04
Heavy muslin	168 09
Cotton flannel	107 68
Union flannel	60 24
Cambric	7 76
Corsets	4 30
Umbrellas	3 90
Thread	46 72
Needles	3 90
Hair pins	6 35
Shoe laces	9 38
Webbing	14 00
Leather mittens	77 44
Pins	20 43
Tape	2 30
Women's slippers	1 00
Thimbles	2 50
Buttons	38 55
Combs	30 00
Spectacles	12 00
Caps	75 00
Boots	24 75
Dress goods	22 00
Sewing room supplies	7 35
Women's drawers	44 22
Balance to general fund	354 78
<hr/>	
Total	\$5,500 00

EXHIBIT No. 2—Continued.

Repairs—

Wages	\$3,674 34
Lumber	378 83
Hardware	234 79
Laundry machinery	175 50
Glass	74 48
Steam and water fittings.....	789 66
Painters' supplies	372 07
Blacksmithing	8 79
Electrical supplies	135 38
Brick, lime, etc.....	85 06
Sewers and drains.....	343 00
Roofs	117 14
Paper hanging	21 15
Tile floors	16 60
Tools	210 09
Roads and walks.....	232 76
Balance to general fund.....	5 36
Total	\$6,875 00

EXHIBIT No. 3.

Being a List of Disbursements on Account of Maintenance for the Fiscal Year Ending September 30, 1907.

No.	To Whom Paid.	On Account of.	Amount.
1.	J. G. Rogers, Med. Supt	Contingent fund.....	\$2,000 00
2.	J. G. Rogers, Med. Supt	Officers' pay-roll.....	918 33
3.	J. G. Rogers, Med. Supt	Employees' pay-roll.....	3,604 83
4.	J. G. Rogers, Med. Supt	Contingent fund payments.....	331 71
5.	Armour & Co	Meats.....	981 14
6.	Swift & Co.....	Meats.....	74 75
7.	Schwarzschild & Sulzberger Co	Meats.....	776 91
8.	Morris & Co.....	Meats.....	87 36
9.	W. C. Routh	Meats.....	140 63
10.	F. W. Kinney	Meats.....	220 25
11.	A. Hawkins & Son.....	Meats.....	12 90
12.	Loughrey Bros	Flour and Feed	1,417 82
13.	L. M. Brackett & Co	Groceries.....	1,285 07
14.	Reid, Murdoch & Co	Groceries.....	1,173 21
15.	Sprague, Warner & Co.....	Groceries.....	611 75
16.	Franklin McVeagh & Co.....	Groceries.....	199 60
17.	LaFayette Grocery Co.....	Groceries.....	212 59
18.	The J. T. Elliott Co.....	Groceries.....	15 84
19.	The Columbia Conserve Co.....	Groceries.....	30 06
20.	National Macaroni Co.....	Groceries.....	27 50
21.	Perfection Biscuit Co.....	Groceries.....	23 66
22.	Frank Hall	Groceries.....	45 75
23.	J. O. Snyder	Beans.....	140 00
24.	Moseley Bros	Beans.....	35 40
25.	Kraus & Apfelbaum.....	Potatoes.....	668 76
26.	John Tamm.....	Potatoes.....	486 88

EXHIBIT No. 3—Continued.

No.	To Whom Paid.	On Account of.	Amount.
27.	Wm. H. Thomas & Co.	Dry goods.	\$151 73
28.	Seybold Dry Goods Co.	Dry goods.	122 50
29.	Daniel Stewart Co.	Drugs.	31 08
30.	Parke, Davis & Co.	Drugs.	45 00
31.	H. Wilder & Co.	House furnishings.	10 15
32.	J. W. Henderson & Son.	Furniture.	8 00
33.	Snider & Alber.	Queensware.	353 66
34.	Buckeye Soap Co.	Chipped soap.	913 75
35.	James S. Kirk & Co.	Soap.	117 50
36.	The Armour Soap Works.	Soap.	116 90
37.	Sanitary Soap Co.	Soap.	28 50
38.	E. S. Rice & Son.	Hardware.	95 80
39.	Flanegin Hardware Co.	Hardware.	19 46
40.	Garlock Packing Co.	Packing.	23 15
41.	J. B. Messenger & Sullivan.	Water fittings.	4 60
42.	The Draper Mfg. Co.	Thermometer.	14 00
43.	Standard Oil Co.	Oils.	48 78
44.	Wm. B. Burford.	Blank books, stationery, etc.	111 47
45.	Thomas Meyer.	Harness supplies.	7 35
46.	Vaughan's Seed Store.	Flower seeds and plants.	19 77
47.	United Fourth Vein Coal Co.	Coal.	1,980 91
48.	Watts Bros.	Tools.	9 25
49.	Capital Paper Co.	Toilet paper.	63 00
50.	Meinecke & Co.	Rubber blankets.	23 50
51.	Logansport Ice & Cold Storage Co.	Ice.	28 80
52.	King Drill Co.	Tools and grates.	22 30
53.	J. I. Holcomb Mfg. Co.	Brushes.	27 25
54.	Indiana Reformatory.	Brooms.	58 00
55.	Geo. A. Schaefer.	Horseshoeing.	15 15
56.	E. M. Hoyt, Cashier.	Freight.	145 06
57.	Thomas Butler.	Horses.	425 00
58.	J. G. Rogers, Med. Supt.	Officers' pay-roll.	918 33
59.	J. G. Rogers, Med. Supt.	Employees' pay-roll.	3,701 32
60.	J. G. Rogers, Med. Supt.	Contingent fund payments.	163 50
61.	Armour & Co.	Meats.	1,076 03
62.	Swift & Co.	Meats.	61 60
63.	Schwarzschild & Sulzberger Co.	Meats.	568 64
64.	W. C. Routh.	Meats.	106 82
65.	Beyer Bros.	Chickens.	209 00
66.	F. W. Kinney.	Chickens and oysters.	37 79
67.	Sprague, Warner & Co.	Groceries.	156 83
68.	Reid, Murdoch & Co.	Groceries.	265 55
69.	Franklin McVeigh & Co.	Groceries.	26 25
70.	L. M. Brackett & Co.	Groceries.	245 28
71.	The J. T. Elliott Co.	Groceries.	277 79
72.	Frank Hall.	Groceries.	33 13
73.	Loughrey Bros.	Corn meal and flour.	17 75
74.	Perfection Biscuit Co.	Crackers.	23 05
75.	Berry-Suhling Tobacco Co.	Tobacco.	168 32
76.	Daniel Stewart Co.	Drugs.	104 16
77.	Harry Tritt.	Drugs.	3 91
78.	Eberbach & Son.	Sphygmograph; watch glasses.	45 50
79.	Wm. H. Thomas & Co.	Dry goods.	92 93
80.	Seybold Dry Goods Co.	Dry goods.	150 03
81.	The Beckman Co.	Bedding.	200 00
82.	E. S. Rice & Son.	Hardware.	10 18
83.	Flanegin Hardware Co.	Hardware and tinware.	17 58
84.	Snider & Alber.	House keeping supplies.	19 67
85.	Wm. B. Burford.	Printing.	10 00
86.	United Fourth Vein Coal Co.	Coal.	2,050 07
87.	Vaughan's Seed Store.	Christmas decorations.	51 05

EXHIBIT No. 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
88.	Standard Oil Co	Oils	\$132 63
89.	Camden and Philadelphia Soap Co	Washing soda	58 80
90.	B. & B. Buggy Co	Sleigh	60 50
91.	Logansport Ice & Cold Storage Co	Ice	10 35
92.	The Alden Spears Sons Co	Mangle apron	12 40
93.	Geo. A. Schaefer	Horseshoeing	19 15
94.	Thomas Meyer	Harness and supplies	7 90
95.	H. Kohnstamm & Co	Laundry supplies	11 06
96.	E. M. Hoyt, Cashier	Freight	20 70
97.	J. G. Rogers, Med. Supt	Officers' pay-roll	948 65
98.	J. G. Rogers, Med. Supt	Employes' pay-roll	3,689 39
99.	J. G. Rogers, Med. Supt	Contingent fund payments	184 88
100.	Armour & Co	Meats	840 39
101.	Swift & Co	Meats	75 35
102.	Schwartzschild & Sulzberger Co	Meats	731 40
103.	W. C. Routh	Meats	128 84
104.	F. W. Kinney	Meats	36 28
105.	Reid, Murdoch & Co	Groceries	177 50
106.	Franklin McVeagh & Co	Groceries	36 90
107.	Sprague, Warner & Co	Groceries	46 70
108.	L. M. Brackett & Co	Fruits	586 25
109.	Perfection Biscuit	Crackers	21 42
110.	Frank Hall	Groceries	26 98
111.	Wiler & Wise	Dry Goods	113 20
112.	Seybold Dry Goods Co	Dry Goods	43 03
113.	H. Wilder & Co	Housekeeping supplies	15 50
114.	John M. Waters	Housekeeping supplies	4 06
115.	Snider & Alber	Housekeeping supplies	15 23
116.	Daniel Stewart Co	Drugs	61 49
117.	Harry Tritt	Drugs	66 05
118.	Oakland Chemical Co	Drugs	7 20
119.	Parke, Davis & Co	Drugs	45 00
120.	J. Ellwood Lee Co	Druggists' sundries	26 40
121.	Peter VanSchaack & Son	Druggists' sundries	14 55
122.	Flanegin Hardware Co	Tinware and hardware	44 86
123.	E. S. Rice & Son	Hardware	33 38
124.	Geo. H. Brewster	Butter machine	10 00
125.	Geo. W. Cann & Co	Electrical supplies	13 85
126.	McCormick & Richardson	Oats	210 00
127.	Geo. A. Schaefer	Horseshoeing	14 40
128.	Vaughan's Seed Store	Flower seeds	51 95
129.	Standard Oil Co	Oil	11 02
130.	United Fourth Vein Coal Co	Coal	1,755 69
131.	E. M. Hoyt, cashier	Freight	6 54
132.	Chas. W. Slick, trustee	Salary and traveling expenses	101 45
133.	Henry A. Barnhart	Salary and traveling expenses	87 15
134.	Warren T. McCray	Salary and traveling expenses	86 10
135.	J. G. Rogers, Med. Supt	Officers' pay-roll	881 90
136.	J. T. Rogers, Med. Supt	Employes' pay-roll	3,702 25
137.	J. G. Rogers, Med. Supt	Contingent fund payments	252 70
138.	Armour & Co	Meats	459 27
139.	Swift & Co	Meats	472 03
140.	Schwartzschild & Sulzberger Co	Meats	562 24
141.	W. C. Routh	Meats	284 36
142.	F. W. Kinney	Meats	29 96
143.	Reid, Murdoch & Co	Groceries	221 13
144.	Sprague, Warner & Co	Groceries	620 81
145.	L. M. Brackett & Co	Groceries	44 00
146.	M. McCaffrey & Co	Groceries	29 25
147.	Franklin McVeigh & Co	Groceries	62 40
148.	Peru Grocery Co	Groceries	41 30

EXHIBIT No. 3—Continued.

No.	To Whom Paid.	On Account of.	Amount.
149.	Perfection Biscuit Co.	Groceries.	\$23 25
150.	Frank Hall	Groceries	36 51
151.	Rice Hardware Co.	Hardware	15 43
152.	Flanegin Hardware Co.	Hardware	24 10
153.	Modern Medicine Co.	Pathological apparatus.	105 00
154.	Harry Tritt	Drugs	48 43
155.	American Distributing Co.	Alcohol	13 45
156.	Culver City Grain & Coal Co.	Ice	98 46
157.	Snider & Alber	Tableware.	17 94
158.	Loughrey Bros.	Bran.	387 45
159.	Standard Oil Co.	Oils	71 57
160.	Vaughan's Seed Store	Plants and seeds	74 40
161.	Jas. P. Martin	Crockery	11 68
162.	Wm. B. Burford	Blanks, etc.	51 25
163.	John M. Waters	Cotton batting	11 21
164.	H. Wiler & Co.	Dry goods	25 50
165.	The Beckman Co.	Blankets	200 00
166.	G. H. Wheelock Co.	Washing soda	8 40
167.	United Breeders' Co.	Horse tonic	9 00
168.	Geo. A. Schaefer	Horseshoeing	23 20
169.	National Aniline Chemical Co.	Bluing	18 75
170.	H. Kohnstamm & Co.	Oxalic acid	9 50
171.	Coldwell Lawn Mower Co.	Parts for mower	17 03
172.	United Fourth Vein Coal Co.	Coal	1,450 93
173.	E. M. Hoyt, Cashier	Freight	130 43
174.	J. G. Rogers, Med. Supt.	Officers' pay-roll	918 33
175.	J. G. Rogers, Med. Supt.	Employes' pay-roll	3,582 00
176.	J. G. Rogers, Med. Supt.	Contingent fund payments	254 89
177.	Armour & Co.	Meats	560 82
178.	Swift & Co.	Meats	469 29
179.	Schwarzschild & Sulzberger Co.	Meats	487 56
180.	W. C. Routh & Co.	Meats	290 60
181.	F. W. Kinney	Meats	30 33
182.	Sprague, Warner & Co.	Groceries	92 80
183.	Reid, Murdoch & Co.	Groceries	62 00
184.	Frank Hall	Groceries	39 12
185.	Loughrey Bros.	Flour	1,156 40
186.	Perfection Biscuit Co.	Crackers	21 67
187.	M. McCaffrey	Eggs	54 00
188.	D. A. Elder & Co.	Fruit	36 50
189.	Peru Grocery Co.	Soap	147 80
190.	Indiana Reformatory	Brooms	58 00
191.	Terre Haute Distilling Co.	Alcohol	22 80
192.	Daniel Stewart Co.	Drugs	105 28
193.	Harry Tritt	Drugs	17 75
194.	J. Ellwood Lee Co.	Druggists' sundries	32 60
195.	Peter VanSchaack & Sons	Druggists' sundries	28 10
196.	Seybold Dry Goods Co.	Dry goods	149 85
197.	Wiler & Wise	Dry goods	103 00
198.	Wm. H. Thomas & Co.	Dry goods	141 63
199.	Capital Paper Co.	Toilet paper	68 23
200.	Globe-Wernecke Co.	Filing cabinet sections	27 50
201.	C. A. Eberlein	Tinware and hardware	77 88
202.	E. S. Rice & Son	Hardware	11 45
203.	The Hunt Hardware Co.	Hardware	30 42
204.	H. Kohnstamm Co.	Laundry supplies	16 49
205.	Samuel Cupples Woodware Co.	Laundry supplies	78 00
206.	United Fourth Vein Coal Co.	Coal	1,471 88
207.	Marden, Orth & Hastings	Hemlock extract	17 79
208.	Logansport Carriage Works	Work on vehicles	15 20
209.	S. Oppenheimer & Co.	Meat cutter and mixer	140 85

EXHIBIT No. 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
210.	Thomas Meyer	Harness supplies	\$11 40
211.	Standard Oil Co	Oils	64 92
212.	Camden & Philadelphia Soap Co	Washing soda	73 50
213.	Geo. A. Schaefer	Horseshoeing	13 75
214.	Logansport Basket Works	Laundry supplies	6 75
215.	Asa Shideler	Stable provender	164 73
216.	Vaughan's Seed Store	Garden seeds	101 55
217.	The Alden Spears Sons Co	Laundry supplies	14 24
218.	Indianapolis Tent & Awning Co	Fly for tent	20 80
219.	E. M. Hoyt, Cashier	Freight	14 47
220.	J. G. Rogers, Med. Supt	Officers' pay-roll	918 33
221.	J. G. Rogers, Med. Supt	Employees' pay-roll	3,702 26
222.	J. G. Rogers, Med. Supt	Contingent fund payments	323 33
223.	Armour & Co	Meats	433 85
224.	Swift & Co	Meats	491 93
225.	Schwarzschild & Sulzberger Co	Meats	503 71
226.	J. C. Routh	Meats	276 84
227.	F. W. Kinney	Meats	23 99
228.	Beyer Bros. Co	Eggs for cold storage	1,312 50
229.	Capital City Dairy Co	Butterine	541 20
230.	Reid, Murdoch & Co	Groceries	273 86
231.	Sprague, Warner & Co	Groceries	274 14
232.	Franklin McVeagh & Co	Groceries	79 88
233.	Frank Hall	Groceries	45 32
234.	Peru Grocery Co	Groceries	135 00
235.	McCaffrey & Co	Groceries	419 88
236.	Loughrey Bros	Flour	105 00
237.	Perfection Biscuit Co	Crackers	22 90
238.	Daniel Stewart Co	Drugs	61 67
239.	Harry Tritt	Drugs	25 20
240.	Parke, Davis & Co	Drugs	45 00
241.	Wm. H. Thomas & Co	Dry goods	277 34
242.	John V. Farwell Co	Dry goods	56 46
243.	Seybold Dry Goods Co	Dry goods	43 86
244.	H. Wilder & Co	House furnishing	39 15
245.	E. S. Rice & Son	Hardware	77 04
246.	C. A. Eberlein	Hardware	158 11
247.	Bausch & Lomb Optical Co	Pathological supplies	12 19
248.	J. W. Henderson & Sons	Furniture	803 96
249.	The Francke Hardware Co	Upholstering supplies	48 63
250.	The Globe-Wernecke Co	Stationery supplies	14 70
251.	Logansport Carriage Works	Blacksmithing and hardware	35 40
252.	C. W. Graves	Overhauling piano	83 70
253.	H. Kohnstamm & Co	Duck for mangle	14 40
254.	Hewes Brothers Poultry Supply Co	Chicken hovers	12 00
255.	Bramhall Range Co	Tinware	32 90
256.	Wm. B. Burford	Stationery	365 77
257.	Farmers Handy Wagon Co	Handy wagon	38 80
258.	Standard Oil Co	Oils	73 96
259.	Wm. Stahle Sprayer Co	Spraying outfit	14 25
260.	W. B. Schwalm	Harrow	12 00
261.	Quaker City Rubber Co	Garden hose	55 50
262.	Worrell Mfg. Co	Insecticide	10 00
263.	West Disinfecting Co	Disinfecting fluid	37 10
264.	United Fourth Vein Coal Co	Coal	487 80
265.	Thomas Meyer	Harness supplies	9 65
266.	Geo. A. Schaefer	Horseshoeing	8 90
267.	Chas. W. Slick	Trustee	98 81
268.	Henry A. Barnhart	Trustee	89 67
269.	Warren T. McCray	Trustee	89 28
270.	E. M. Hoyt, Cashier	Freight	8 52

EXHIBIT No. 3—Continued.

No.	To Whom Paid.	On Account of.	Amount.
271.	J. G. Rogers, Med. Supt.	Officers' pay-roll	\$918 33
272.	J. G. Rogers, Med. Supt.	Employees' pay-roll	3,695 66
273.	J. G. Rogers, Med. Supt.	Contingent fund payments	128 18
274.	Armour & Co.	Meats	520 13
275.	Swift & Co.	Meats	565 05
276.	Schwarzschild & Sulzberger Co.	Meats	193 40
277.	W. C. Routh & Co.	Meats	123 68
278.	F. W. Kinney	Meats	10 77
279.	Byer Bros.	Eggs	247 50
280.	Reid, Murdoch & Co.	Groceries	35 49
281.	Sprague, Warner & Co.	Groceries	51 46
282.	Peru Grocery Co.	Groceries	497 43
283.	Frank Hall	Groceries	31 43
284.	Perfection Biscuit Co.	Crackers	46 21
285.	Snider & Alber	Glassware and queensware	254 61
286.	Franklin McVeagh & Co.	Tobacco	363 51
287.	Daniel Stewart Co.	Drugs	73 78
288.	Harry Tritt	Drugs	21 53
289.	Whitall Tatum Co.	Druggists' sundries	18 85
290.	Seybold Dry Goods Co.	Dry goods	82 50
291.	Wiler & Wise	Dry goods	16 36
292.	Wm. H. Thomas & Co.	Dry goods	14 48
293.	John V. Farwell Co.	Dry goods	158 47
294.	H. W. Baker Linen Co.	Dry goods	205 37
295.	E. S. Rice & Son	Hardware	27 51
296.	S. W. Ullery & Son	Hardware	15 41
297.	Flanegin Hardware Co.	Tinware	7 65
298.	Logansport Carriage Works	Blacksmithing	15 75
299.	The Garlock Packing Co.	Packing	17 18
300.	Sinclair Laundry Machinery Co.	Starch machine	38 00
301.	Standard Oil Co.	Oils	105 89
302.	Central Rubber & Supply Co.	Steam hose and electric lamps	81 55
303.	Wm. B. Burford	Stationery	49 34
304.	Vaughan's Seed Store	Seeds, etc	12 43
305.	Geo. A. Schaefer	Horseshoeing	19 55
306.	Logansport Basket Works	Lumber	92 46
307.	United Fourth Vein Coal Co.	Coal	1,176 56
308.	E. M. Hoyt, Cashier	Freight	11 89
309.	J. G. Rogers, Med. Supt.	Officers' pay-roll	958 34
310.	J. G. Rogers, Med. Supt.	Employees' pay-roll	3,742 30
311.	J. G. Rogers, Med. Supt.	Contingent fund payments	169 91
312.	Armour & Co.	Meats	739 88
313.	Swift & Co.	Meats	395 81
314.	Schwarzschild & Sulzberger Co.	Meats	174 48
315.	W. C. Routh & Co.	Meats	102 86
316.	Beyer Bros. Co.	Eggs	220 50
317.	Dennis Uhl & Co.	Flour and corn meal	1,489 33
318.	Loughrey Bros.	Corn meal	15 00
319.	Reid, Murdoch & Co.	Groceries	228 66
320.	Sprague, Warner & Co.	Groceries	30 75
321.	Franklin McVeagh & Co.	Groceries	80 63
322.	L. M. Brackett & Co.	Groceries	96 75
323.	Frank Hall	Groceries	31 87
324.	Perfection Biscuit Co.	Crackers	24 48
325.	The Capital City Dairy Co.	Butterine	540 00
326.	Snider & Alber	Glassware and queensware	89 45
327.	John V. Farwell Co.	Dry goods	210 55
328.	Wm. H. Thomas & Co.	Dry goods	109 88
329.	Seybold Dry Goods Co.	Dry goods	61 45
330.	Daniel Stewart Co.	Drugs	50 36
331.	The Santa Clara Wine Co.	Whiskey	34 05

EXHIBIT No. 3—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
332.	Lewis Batting Co	Gauze	\$25 00
333.	Western Bottle Mfg. Co	Druggists' sundries	10 00
334.	Rice Hardware Co	Tools and hardware	42 65
335.	Flanegin Hardware Co	Hardware and tinware	14 55
336.	Michigan Salt Association	Salt	60 00
337.	Peter VanSchaack & Son	Sponges	15 28
338.	J. R. Baker & Sons Co	Bedside tables	17 70
339.	The Pantasote Co	Pantasote	58 65
340.	H. W. Baker Linen Co	Table linen	43 75
341.	The Garlock Packing Co	Ring packing	9 15
342.	Geo. A. Schaefer	Horseshoeing	12 25
343.	H. Kohnstamm Co	Laundry supplies	23 01
344.	Logansport Basket Works	Lumber and baskets	17 35
345.	The Armour Soap Works	Soap	136 00
346.	Montgomery Ward & Co	Buckets	9 10
347.	Sears, Roebuck & Co	Baseball equipment	50 16
348.	G. G. Fry Co	Sanitary soap	27 00
349.	Standard Oil Co	Oils	16 60
350.	Kroeger & Strain	Undertaking	10 00
351.	Killian & McCloskey	Undertaking	10 00
352.	The Seneca Falls Mfg. Co	One mortiser	27 90
353.	United Fourth Vein Coal Co	Coal	179 40
354.	E. M. Hoyt, Cashier	Freight	45 64
355.	J. G. Rogers, Med. Supt	Officers' pay-roll	958 34
356.	J. G. Rogers, Med. Supt	Employes' pay-roll	4,044 60
357.	J. G. Rogers, Med. Supt	Contingent fund payments	176 96
358.	Armour & Co	Meats	622 25
359.	Swift & Co	Meats	496 43
360.	Schwarzschild & Sulzberger Co	Meats	194 75
361.	W. C. Routh & Co	Meats	111 36
362.	Beyer Bros. Co	Eggs	192 00
363.	L. M. Brackett & Co	Groceries	168 50
364.	Peru Grocery Co	Groceries	747 51
365.	Reid, Murdoch & Co	Groceries	766 31
366.	Sprague, Warner & Co	Groceries	369 75
367.	Perfection Biscuit Co	Crackers	21 83
368.	Chapman & Smith Co	Bakers' supplies	12 40
369.	Frank Hall	Groceries	32 31
370.	Indiana Reformatory	Brooms	66 03
371.	Wiler & Wise	Dry goods	326 34
372.	Seybold Dry Goods Co	Dry goods	9 23
373.	John V. Farwell Co	Dry goods	20 82
374.	H. Wiler & Co	House furnishings	7 45
375.	Harry C. Tritt	Drugs	42 66
376.	Pittman-Meyers Co	Drugs	32 10
377.	Parke, Davis & Co	Drugs	44 25
378.	Daniel Stewart Co	Drugs	14 00
379.	Rice Hardware Co	Hardware	46 28
380.	Flanegin Hardware Co	Hardware and tinware	13 95
381.	McMaster Carr Supply Co	Steam fittings	42 95
382.	The Higgins Mfg. Co	Window screens	168 00
383.	J. W. Henderson & Sons	Furniture	12 00
384.	Northern Ohio Blanket Mills	Blankets	600 00
385.	Snider & Alber	Queensware	38 89
386.	Vaughan's Seed Store	Seeds	6 60
387.	Wm. B. Burford	Stationery and printing	122 42
388.	Standard Oil Co	Oils	121 56
389.	Geo. A. Schaefer	Horseshoeing	17 70
390.	H. Kohnstamm & Co	Duck	28 80
391.	Woll & Tucker	Undertaking	10 00
392.	United Fourth Vein Coal Co	Coal	311 82

EXHIBIT No. 3—Continued.

No.	To Whom Paid.	On Account of.	Amount.
393.	Loughrey Bros	Bran	\$350 51
394.	Willard Briggs	Hay	141 73
395.	John Webber	Hay	86 49
396.	Abraham Shideler	Hay	128 75
397.	Daniel Mahoney	Hay	195 66
398.	Herman Homburg	Hay	224 64
399.	Chas. Chambers	Hay	198 45
400.	V. P. Chambers	Hay	450 26
401.	Samuel Chambers	Hay	242 85
402.	Chas. W. Slick	Trustee	101 31
403.	Henry A. Bernhart	Trustee	85 88
404.	Warren T. McCray	Trustee	85 59
405.	Wm. A. Morris	Trustee	80 99
406.	E. M. Hoyt, Cashier	Freight	14 46
407.	J. G. Rogers, Med. Supt	Officers' pay-roll	958 34
408.	J. G. Rogers, Med. Supt	Employes' pay-roll	3,994 59
409.	J. G. Rogers, Med. Supt	Contingent fund payments	149 99
410.	Armour & Co	Meats	359 82
411.	Swift & Co	Meats	453 27
412.	Schwarzschild & Sulzberger Co	Meats	488 79
413.	W. C. Routh & Co	Meats	156 63
414.	Beyer Bros. Co	Eggs	216 00
415.	Capital City Dairy Co	Butterine	541 15
416.	W. M. Shafer & Co	Groceries	204 25
417.	Reid, Murdoch & Co	Groceries	42 15
418.	Sprague, Warner & Co	Groceries	42 00
419.	Frank Hall	Groceries	46 19
420.	Elliott Grocery Co	Groceries	39 99
421.	Perfection Biscuit Co	Crackers	30 80
422.	Loughrey Bros	Corn meal	15 00
423.	Harry C. Tritt	Drugs	30 57
424.	Daniel Stewart Co	Drugs	15 10
425.	Terre Haute Distilling Co	Alcohol	23 43
426.	Henry Weinhausen	Thermometers	13 20
427.	J. Ellwood Lee Co	Druggists' sundries	8 48
428.	Snider & Alber	Tableware	48 36
429.	Flanegin Hardware Co	Hardware	27 60
430.	Rice Hardware Co	Hardware	15 05
431.	Seybold Dry Goods Co	Dry goods	287 51
432.	H. Kohnstamm Co	Laundry supplies	14 51
433.	Wm. B. Burford	Stationery	66 60
434.	Vaughan's Seed Store	Bulbs	20 00
435.	Standard Oil Co	Oils and stoves	87 31
436.	C. M. Burge	Veterinary services	20 00
437.	Killian & McCloskey	Undertaking	10 00
438.	Geo. A. Schaefer	Blacksmithing	13 65
439.	Logansport Carriage Works	Truck tires	13 50
440.	G. H. Lounsbury & Sons	Imitation leather	60 00
441.	Hartford Steam Boiler Inspection and Insurance Co	Boiler insurance	200 00
442.	Chas. J. Tagliabue Mfg. Co	Overhauling pyrometer	7 50
443.	United Fourth Vein Coal Co	Coal	312 21
444.	The Sanitary Soap Co	Paint soap	29 46
445.	Crandall Packing Co	Packing	27 98
446.	The Garlock Packing Co	Packing	8 68
447.	E. H. Hoyt, Cashier	Freight	2 77
448.	J. G. Rogers, Med. Supt	Officers' pay-roll	958 34
449.	J. G. Rogers, Med. Supt	Employes' pay-roll	4,019 39
450.	Armour & Co	Meats	367 43
451.	Swift & Co	Meats	400 37
452.	Schwarzschild & Sulzberger Co	Meats	355 48

EXHIBIT No. 3—Continued.

No.	To Whom Paid.	On Account of.	Amount.
453.	W. C. Routh	Meats	\$93 28
454.	Beyer Bros. Co.	Eggs	243 00
455.	Morris & Co.	Butterine	85 32
456.	Capital City Dairy Co.	Butterine	1 50
457.	Frank Hall	Groceries	31 55
458.	The Fleischmann Co.	Yeast	9 00
459.	Barbee Wire & Iron Works	Window guards	139 00
460.	Eberbach & Sons	Sphygmograph paper	3 00
461.	Meinecke & Co.	Druggists' sundries	27 70
462.	Smith & Davis Mfg. Co.	Wire fabrics	65 60
463.	Standard Oil Co.	Oils	27 38
464.	Fraser Tablet Co.	Medical charts	2 50
465.	Daniel Stewart Co.	Drugs	7 50
466.	Pittman-Meyers Co.	Drugs	54 36
467.	Parke, Davis & Co.	Drugs	45 00
468.	United Fourth Vein Coal Co.	Coal	249 02
469.	National Chemical Co.	Washing soda	94 00
470.	Detroit Stoker & Foundry Co.	Stoker parts	15 78
471.	W. A. Morris	Trustee	54 20
472.	Chas. W. Slick	Trustee	65 10
473.	Warren T. McCray	Trustee	56 84
474.	Henry A. Barnhart	Trustee	58 93
475.	Snider & Alber	Tableware	26 30
476.	H. Wiler & Co.	Furniture and furnishings	230 17
477.	Seybold Dry Goods Co.	Dry goods	104 85
478.	Wiler & Wise	Dry goods	78 65
479.	Ike Oppenheimer	Housekeeping supplies	14 87
480.	Flanegin Hardware Co.	Hardware Co.	15 65
481.	C. A. Eberlein	Tinware	15 05
482.	C. W. Graves	Books and base balls	21 56
483.	Logansport Machine & Foundry Co.	Tools	3 75
484.	Rubbetex Cloth & Paper Co.	Belting	10 00
485.	Logansport Carriage Works	Blacksmithing	2 25
486.	T. C. Johnson	Watermelons	29 50
487.	Harry Tritt	Drugs	11 43
488.	Rice Hardware Co.	Hardware	37 08
489.	Geo. A. Schaefer	Horseshoeing	14 00
490.	W. L. Fernald	Lumber	11 04
491.	Elliott Grocery Co.	Wash boards	3 00
492.	W. I. Shearer & Son	Ice Cream	6 00
493.	Longwell, Cummings Co.	Wrapping paper and stickers	3 25
494.	A. W. Gamble, Steward	Expenses, final settlement	3 15
495.	J. C. White	Chaplain	5 00
496.	A. A. Mainwaring	Chaplain	5 00
497.	D. W. Erb	Organist	4 00
498.	A. Hawkins & Son	Lamb chops	1 75
499.	Western Union Telegraph Co.	Telegrams	4 55
500.	Adams Express Co.	Expressage	4 10
501.	Logansport Journal	Advertising	2 00
502.	Logansport Times	Advertising	2 00
503.	Logansport Chronicle	Advertising	2 00
504.	Logansport Pharos	Advertising	2 00
505.	Logansport Reporter	Advertising	2 00
506.	E. M. Hoyt, Cashier	Freight	2 65
507.	E. W. Snyder	Watermelons	47 25
508.	John M. Johnston	Stamps	13 98

Total	\$128,243 45
Less contingent fund heretofore drawn	2,000 00

Total	\$126,243 45
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EXHIBIT No. 3—Continued.

Appropriation fixed.....	\$135,000 00
Less one-twelfth on account of change in fiscal year	11,250 00
	<hr/>
	\$123,750 00
Appropriation on account of increase of population over 834	4,119 19
	<hr/>
	\$127,869 19
Disbursements	126,243 45
	<hr/>
Balance covered into State treasury.....	\$1,625 74

I certify that the above is a correct transcript.

A. W. GAMBLE,
Steward.

EXHIBIT No. 4.

*Being a List of Disbursements on Account of Clothing for the Fiscal Year
Ending September 30, 1907.*

No.	To Whom Paid.	On Account of.	Amount.
1.	J. G. Rogers, Med. Supt.	Sewing room pay-roll	\$74 60
2.	Indiana Reformatory	Clothing.....	469 20
3.	Seybold Dry Goods Co.....	Clothing.....	344 50
4.	Wm. H. Thomas & Co.....	Clothing.....	156 56
5.	Sol. Allman.....	Clothing.....	78 02
6.	Benjamin & Williams.....	Ladies' hats.....	30 50
7.	W. M. Graffis.....	Shoes.....	4 00
8.	Jos. Taylor & Sons.....	Shoemakers' supplies.....	1 75
9.	J. G. Rogers, Med. Supt.....	Sewing room pay-roll.....	73 00
10.	Wm. H. Thomas & Co.....	Clothing.....	72 10
11.	Humane Restraint Co.....	Leather mittens and wristlets..	69 00
12.	Wiler & Wise.....	Clothing.....	50 24
13.	Seybold Dry Goods Co.....	Dry goods.....	10 56
14.	Eagle Lock Co.....	Buckles.....	5 44
15.	W. M. Graffis.....	Shoes.....	3 00
16.	Thomas Meyer.....	Restraint straps.....	3 00
17.	J. G. Rogers, Med. Supt.....	Sewing room pay-roll.....	73 00
18.	John M. Waters.....	Dry goods.....	66 89
19.	Helvie & Sellers.....	Jackets.....	26 00
20.	Wm. H. Thomas & Co.....	Combs.....	9 00
21.	Jos. Taylor & Sons.....	Shoemakers' supplies.....	8 54
22.	W. M. Graffis.....	Shoes.....	2 00
23.	J. G. Rogers, Med. Supt.....	Sewing room pay-roll.....	76 00
24.	W. M. Graffis.....	Shoes.....	92 40
25.	Jos. Taylor & Sons.....	Shoemakers' supplies.....	6 01
26.	Seybold Dry Goods Co.....	India linen.....	5 40
27.	Helvie & Sellers.....	Duck gloves.....	1 00
28.	J. G. Rogers, Med. Supt.....	Sewing room pay-roll.....	94 00
29.	Indiana Reformatory.....	Men's coats and vests.....	239 40
30.	Wm. H. Thomas & Co.....	Clothing.....	196 03
31.	The Otto Shoe & Clothing Co.....	Men's shirts.....	100 00

EXHIBIT No. 4—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
32.	The Seybold Dry Goods Co.	Dry goods.	*\$35 20
33.	W. M. Graffis	Shoes.	2 25
34.	The Singer Sewing Machine Co.	Needles.	1 00
35.	E. M. Hoyt, Cashier.	Freight.	1 68
36.	J. G. Rogers, Med. Supt.	Sewing room pay-roll.	91 90
37.	Seybold Dry Goods Co.	Dry goods.	201 87
38.	Jos. Taylor & Sons.	Shoemakers' supplies.	7 33
39.	Wm. H. Thomas & Co.	Clothing.	117 00
40.	John V. Farwell Co.	Clothing.	112 78
41.	W. M. Graffis	Shoes.	5 50
42.	Helvie & Sellers.	Gloves.	1 00
43.	J. G. Rogers, Med. Supt.	Sewing room pay-roll.	74 00
44.	Seybold Dry Goods Co.	Clothing and dry goods.	249 51
45.	Wm. H. Thomas & Co.	Clothing and dry goods.	186 82
46.	John M. Waters.	Ladies' hose.	15 00
47.	W. M. Graffis	Boots and shoes.	8 75
48.	John V. Farwell Co.	Sun bonnets and hosiery.	3 89
49.	Singer Sewing Machine Co.	Sewing room supplies.	3 60
50.	J. G. Rogers, Med. Supt.	Sewing room pay-roll.	84 10
51.	John M. Waters.	Ladies' hose.	46 25
52.	Seybold Dry Goods Co.	Clothing.	23 03
53.	John V. Farwell Co.	Clothing.	11 20
54.	W. M. Graffis	Rubber boots.	7 00
55.	J. G. Rogers, Med. Supt.	Sewing room pay-roll.	91 58
56.	Schroeder & Porter Shoe Co.	Shoes.	215 25
57.	Wm. H. Thomas & Co.	Clothing.	56 89
58.	John V. Farwell Co.	Dry goods.	31 67
59.	Seybold Dry Goods Co.	Dry goods.	16 45
60.	John M. Waters.	Sun bonnets.	15 00
61.	The Otto Shoe & Clothing Co.	Clothing.	3 00
62.	W. M. Graffis	Slippers.	1 25
63.	J. G. Rogers, Med. Supt.	Sewing room pay-roll.	78 03
64.	Seybold Dry Goods Co.	Clothing.	99 68
65.	Wm. H. Thomas & Co.	Shirts.	33 60
66.	Jos. Taylor & Sons.	Shoemakers' supplies.	8 18
67.	W. M. Graffis	Boots.	4 75
68.	Wiler & Wise.	Underwear.	1 44
69.	J. G. Rogers, Med. Supt.	Pay-roll.	66 93
70.	Indiana Reformatory.	Men's clothing.	555 00
71.	Wiler & Wise.	Underwear.	120 00
72.	Seybold Dry Goods Co.	Dry goods.	5 55
73.	W. M. Graffis	Shoes.	4 50
74.	Helvie & Sellers.	Duck gloves.	3 00
75.	Singer Sewing Machine Co.	Needles and shuttles.	1 40
Total			\$5,145 22
Appropriation			\$6,000 00
Less one-twelfth on account of change in fiscal year.			500 00
			\$5,500 00
Disbursements			5,145 22
Balance covered into State treasury.			\$354 75

I certify that the above is a correct transcript.

A. W. GAMBLE,
Steward.

EXHIBIT No. 5.

*Being a List of Disbursements on Account of Repairs for the Fiscal Year
Ending September 30, 1907.*

<i>No</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
1.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	\$348 17
2.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	196 46
3.	The Babcock & Wilcox Co.	Steam and water fittings	121 30
4.	Dean Brothers Steam Pump Works	Steam and water fittings	28 75
5.	Crane Co.	Steam and water fittings	2 55
6.	L. Wolff Mfg. Co.	Steam and water fittings	14 24
7.	J. J. Hildebrandt Co.	Steam and water fittings	53 88
8.	Stevens Brothers	Lumber	7 93
9.	E. S. Rice & Son	Hardware	38 33
10.	Ben Fisher	Painters' supplies	4 70
11.	Logansport Drug Co.	Painters' supplies	12 00
12.	Standard Oil Co.	Painters' supplies	11 70
13.	Casparis Stone Co.	Stone screenings	43 21
14.	E. M. Hoyt, Cashier	Freight	43 22
15.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	347 31
16.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	214 93
17.	Knight & Jillson Co.	Steam and water fittings	26 43
18.	Detroit Stoker & Foundry Co.	Steam and water fittings	3 35
19.	The Iron Engine Co.	Steam and water fittings	24 00
20.	Jenkins Brothers	Steam and water fittings	49 78
21.	Central Rubber & Supply Co.	Steam and water fittings	9 04
22.	Linton & Graf	Steam and water fittings	11 00
23.	Jas. B. Clow & Sons	Steam and water fittings	47 95
24.	L. Wolff Mfg. Co.	Steam and water fittings	10 41
25.	Standard Oil Co.	Painters' supplies	51 97
26.	Logansport Drug Co.	Painters' supplies	3 00
27.	Stevens Bros.	Lumber	65 53
28.	Nelson & Kreuter Co.	Laundry machinery	175 50
29.	Casparis Stone Co.	Screenings	24 96
30.	Yale & Towne Mfg. Co.	Lock repairs	32 45
31.	Nye Tool & Machine Works	Tools	5 00
32.	E. S. Rice & Son	Hardware	48 90
33.	E. M. Hoyt, Cashier	Freight	26 23
34.	C. A. Eberlein	Smoke pipe for green house	7 29
35.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	282 31
36.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	186 79
37.	E. S. Rice & Son	Hardware and glass	28 14
38.	The Varney Electrical Supply Co.	Electrical supplies	27 17
39.	Casparis Stone Co.	Stone screenings	23 69
40.	Harry Tritt	Paint	18 74
41.	Detroit Stoker & Foundry Co.	Stoker repairs	14 85
42.	L. Wolff Mfg. Co.	Water fittings	9 40
43.	Detroit Lubricator Co.	Lubricator	7 00
44.	W. S. Williams	C.O.D. charges, governor spr'gs.	4 95
45.	S. W. Ullery & Son	Hardware	4 10
46.	E. M. Hoyt, Cashier	Freight	22 95
47.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	283 32
48.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	159 81
49.	W. H. Porter	Painters' supplies	66 25
50.	Harry Tritt	Painters' supplies	43 90
51.	Standard Electrical Mfg. Co.	Electric lamps	42 50
52.	Standard Oil Co.	Oils	31 40
53.	Lowe Bros. Co.	Paint	27 00
54.	Vandalia R. R. Co.	Steam and water fittings	12 77

EXHIBIT No. 5.—Continued.

<i>No.</i>	<i>To Whom Paid.</i>	<i>On Account of.</i>	<i>Amount.</i>
55.	J. J. Hildebrandt Co.	Steam and water fittings	\$11 20
56.	S. W. Ullery & Son	Hardware	9 15
57.	Rice Hardware Co.	Hardware	4 70
58.	Frank Seberbach	Repairing bush hammer	1 50
59.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	279 08
60.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	110 57
61.	C. A. Eberlein	Roof repairs and hardware	100 99
62.	Stevens Bros.	Lumber	47 78
63.	Standard Oil Co.	Oils	34 25
64.	United States Encaustic Tile Works	Tile	16 04
65.	Varney Electrical Supply Co.	Electrical supplies	15 51
66.	J. VanBuskirk	Lumber	12 65
67.	Harry Tritt	Paint	5 03
68.	S. W. Ullery & Son	Iron and tools	5 10
69.	E. M. Hoyt, Cashier	Freight	1 52
70.	Jas. B. Clow & Sons	Water fittings	15 00
71.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	15 73
72.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	348 17
73.	D. V. Reedy & Co.	Elevator	125 00
74.	Standard Oil Co.	Painters' supplies	36 25
75.	W. H. Porter	Painters' supplies	3 00
76.	Flanegin Hardware Co.	Hardware	72 50
77.	Caspais Stone Co.	Screenings	26 34
78.	E. S. Rice & Son	Hardware	13 60
79.	Babcock & Wilcox Co.	Engineer's supplies	9 60
80.	Hoppes Mfg. Co.	Engineer's supplies	1 75
81.	E. M. Hoyt, Cashier	Freight	26 90
82.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	348 31
83.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	93 60
84.	Bell Paint Co.	Roof paint	17 49
85.	E. S. Rice & Son	Hardware	21 92
86.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	283 17
87.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	121 31
88.	L. Wolff Mfg. Co.	Plumbing material	192 07
89.	Stevens Bros.	Lumber	154 67
90.	Rice Hardware Co.	Hardware	13 86
91.	C. L. Dilley & Co.	Cement and lime putty	11 86
92.	Gottlieb Schaefer	Gravel	10 50
93.	Liberty Mfg. Co.	Repairs on tube cleaner	8 48
94.	The Babcock & Wilcox	Fittings for boiler tube	7 80
95.	E. M. Hoyt, Cashier	Freight	7 02
96.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	51 30
97.	The Iron Engine Co.	Repairs on engine	65 00
98.	C. L. Dilley & Co.	Lime, brick and cement	60 20
99.	Stevens Bros.	Lumber	59 28
100.	C. A. Eberlein	Roof repairs	44 55
101.	L. Wolff Mfg. Co.	Water fittings	23 29
102.	H. Wiler & Co.	Wall papering	21 15
103.	A. J. Gallion	Cement	20 00
104.	Gottlieb Schaefer	Sand	10 50
105.	Henry Vogt Machine Co.	Ammonia pump repairs	8 75
106.	Logansport Machine Co.	Engine repairs	5 30
107.	Stevens Bros.	Lumber	30 99
108.	Rice Hardware Co.	Hardware	20 85
109.	Nye Tool and Machine Works	Dies	11 00
110.	C. L. Dilley & Co.	Lime and fire clay	8 00
111.	Logansport Machine Co.	Repairs on engine	7 75
112.	Martin Senour Co.	Paint	3 60
113.	Gottlieb Schaefer	Sand	4 50
114.	Jerry Kerns	Sewer pipe	300 00
115.	The Fostoria Incandescent Lamp Co.	Electric lamps	50 20

EXHIBIT No. 5—Continued.

No.	To Whom Paid.	On Account of.	Amount.
116.	Dean Bros. Steam Pump Works.....	Pump repairs.....	\$7 00
117.	American Laundry Machinery Co.....	Extractor repairs.....	3 10
118.	C. L. Dilley & Co.....	Lime putty.....	2 50
119.	Linton & Graf.....	Five inch nipple.....	1 35
Total.....			\$6,869 64
Appropriation			\$7,500 00
Less one-twelfth on account of change in fiscal year.....			625 00
			\$6,875 00
Disbursements			6,869 64
Covered into State treasury.....			\$5 36

I certify that the above is a correct transcript.

A. W. GAMBLE,
Steward.

EXHIBIT No. 6.

*Being a List of Disbursements on Account of Buildings, 1906-7 for the
Fiscal Year Ending September 30, 1907.*

No.	To Whom Paid.	On Account of.	Amount.
1.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	\$833 02
2.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	1,070 93
3.	H. W. John-Manville Co.....	Pipe covering.....	511 33
4.	United States Cement Co.....	Cement.....	220 80
5.	Stevens Bros.....	Lumber.....	217 40
6.	Knapp Supply Co.....	Pipe and fittings.....	158 09
7.	Varney Electrical Supply Co.....	Electrical supplies.....	139 50
8.	Indiana Brick Co.....	Brick.....	112 00
9.	E. M. Hoyt, Cashier.....	Freight.....	161 30
10.	Flanegin Hardware Co.....	Sash irons and weights.....	94 72
11.	C. L. Dilley & Co.....	Sewer pipe.....	357 78
12.	Wm. Henke.....	Patterns for castings.....	16 65
13.	Edward Sauer.....	Stone.....	37 30
14.	Gottlieb Schaefer.....	Sand.....	79 50
15.	The A. Burdsal Co.....	Paint.....	69 33
16.	Ben Fisher.....	Paint.....	14 10
17.	E. S. Rice & Son.....	Hardware.....	15 56
18.	J. J. Hildebrandt Co.....	Pipe and fittings.....	15 51
19.	C. A. Eberlein.....	Roofing.....	1,932 08
20.	American Radiator Co.....	Heating apparatus.....	2,070 62
21.	Stevens Bros.....	Door and window lumber.....	836 66
22.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	1,076 13
23.	Henry Melton.....	Architect.....	150 00
24.	The Alpha Slate Co.....	Slate stairways and mantels.....	214 68
25.	Gottlieb Schaefer.....	Sand.....	81 00
26.	Geo. E. Watson Co.....	Filler.....	66 30
27.	W. H. Porter.....	Floor varnish.....	36 25
28.	Logansport Drug Co.....	Floor varnish.....	27 00
29.	John J. Hildebrandt Co.....	Cellar drains and pipe.....	9 29
30.	Stevens Bros.....	Lumber.....	110 40

EXHIBIT No. 6—Continued.

No.	To Whom Paid.	On Account of.	Amount.
31.	Flanegin Hardware Co.....	Metal lath and steel ceiling....	\$908 90
32.	E. S. Rice & Son.....	Wire netting.....	2 40
33.	C. A. Eberlein.....	Tin roofing.....	220 89
34.	E. M. Hoyt, Cashier.....	Freight.....	83 39
35.	H. R. Byerly.....	Electric lighting.....	2 65
36.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	747 97
37.	Barbee Wire & Iron Works.....	Window guards.....	568 55
38.	Flanegin Hardware Co.....	Locks and butts.....	546 95
39.	Stevens Bros.....	Door frames and lumber.....	248 95
40.	Western Motor Works.....	Floor thimbles.....	98 50
41.	E. M. Hoyt, Cashier.....	Freight.....	76 85
42.	Indiana Brick Co.....	Brick.....	75 00
43.	H. R. Byerly.....	Salary as painter.....	65 00
44.	Honeywell Heating Specialty Co.....	Heat generators.....	50 30
45.	W. H. Porter.....	Painters' supplies.....	44 60
46.	H. W. Johns-Manville Co.....	Mineral wool.....	29 00
47.	Knapp Supply Co.....	Pipe hangers and fixtures.....	1,324 47
48.	C. L. Dilley & Co.....	Lime and sewer pipe.....	25 08
49.	E. S. Rice & Son.....	Packing and screws.....	21 75
50.	Quaker City Rubber Co.....	Hose reels and packing.....	14 70
51.	Knight & Jillson Co.....	Plumbers' supplies.....	9 75
52.	J. J. Hildebrandt Co.....	Plumbers' supplies.....	8 26
53.	Andrew Reid.....	Coal stove.....	4 00
54.	American Radiator Co.....	Heating apparatus.....	2,069 75
55.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	1,620 73
56.	Tiffany Enameled Brick Co.....	Enameled brick.....	408 32
57.	United States Encaustic Tile Works.....	Tile.....	402 16
58.	Philadelphia & Boston Face Brick Co.....	Brick.....	222 72
59.	Barbee Wire & Iron Works.....	Window screens.....	222 00
60.	Stevens Bros.....	Door frames and castings.....	675 06
61.	Knight & Jillson Co.....	Hot-water fittings.....	82 42
62.	Jenkins Bros.....	Hot-water fittings.....	62 44
63.	John J. Hildebrandt Co.....	Hot-water fittings.....	45 08
64.	Central Rubber & Supply Co.....	Packing.....	25 20
65.	Wm. Henkee.....	Wood patterns for castings.....	11 00
66.	Vandalia R. R. Co.....	Four pieces mill steel.....	9 35
67.	Bishop Elevator Co.....	Coke.....	6 00
68.	Varney Electrical Supply Co.....	Electrical supplies.....	5 64
69.	C. L. Dilley & Co.....	Lime and cement.....	8 60
70.	Harry Tritt.....	Paint and varnish.....	6 75
71.	W. H. Porter.....	White lead.....	37 50
72.	H. R. Byerly.....	Painter.....	60 36
73.	Wiler & Wise.....	Bedding.....	78 30
74.	John M. Waters.....	Bedding.....	48 30
75.	Gottlieb Schaefer.....	Sand.....	6 00
76.	Wallace Machine & Foundry Co.....	Iron columns.....	30 80
77.	Rice Hardware Co.....	Glass.....	44 75
78.	E. M. Hoyt, Cashier.....	Freight.....	232 26
79.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	1,026 73
80.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	806 58
81.	Herman Wessel Mfg. Co.....	Mattresses and pillows.....	2,007 00
82.	Tiffany Enameled Brick Co.....	Brick.....	881 94
83.	United States Encaustic Tile Co.....	Floor tile.....	425 32
84.	Knight & Jillson Co.....	Plumbing material.....	385 08
85.	H. W. Johns-Manville Co.....	Heating supplies.....	218 25
86.	Wiler & Wise.....	Muslin and crash.....	188 76
87.	J. J. Hildebrandt Co.....	Heating material.....	175 90
88.	Henry M. Melton.....	Services as architect.....	150 00
89.	American Radiator Co.....	Heating supplies.....	115 04
90.	C. A. Eberlein.....	Galvanized iron work.....	88 40
91.	E. M. Hoyt, Cashier.....	Freight.....	86 61

EXHIBIT No. 6—Continued.

No.	To Whom Paid.	On Account of.	Amount.
92.	Harry C. Tritt.....	Ground glue.....	\$80 00
93.	A. Burdsal Co.....	Paint and putty.....	56 75
94.	C. L. Dilley & Co.....	Lime and putty.....	35 22
95.	Linton & Graf.....	Water pipe.....	33 47
96.	Gottlieb Schaefer.....	Sand.....	30 25
97.	Western Motor Co.....	Floor plates.....	26 70
98.	Central Supply Co.....	Rent of pipe machine.....	15 46
99.	W. H. Porter.....	Paint.....	15 00
100.	Stevens Brothers.....	Lumber and door frames.....	14 50
101.	Central Rubber & Supply Co.....	Valves and covers.....	14 30
102.	E. S. Rice & Son.....	Hardware.....	14 22
103.	The Hoppes Mfg. Co.....	Balance valve.....	12 80
104.	A. C. Heitschmidt.....	White sand.....	12 00
105.	Pratt & Lambert Co.....	Varnish.....	5 95
106.	Logansport Waterworks.....	Lead pipe.....	6 97
107.	E. E. Williams.....	Lime putty.....	5 40
108.	M. C. Honeywell.....	Pipe cutter wheels.....	2 64
109.	McMaster Davis Supply Co.....	Beam clamps.....	2 40
110.	Jas. B. Clow & Sons.....	Plumbing material.....	7 91
111.	H. H. York.....	Engineer.....	80 00
112.	H. R. Byerly.....	Painter.....	65 00
113.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	1,209 39
114.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	813 96
115.	Smith & Davis Mfg. Co.....	Wire mattresses.....	463 40
116.	Knight & Jillson Co.....	Plumbing material.....	409 43
117.	The John J. Hildebrandt Co.....	Plumbing material.....	213 14
118.	Jas. B. Clow & Sons.....	Plumbing material.....	357 91
119.	L. Wolf Mfg. Co.....	Plumbing material.....	207 61
120.	C. A. Eberlein.....	Heating supplies.....	133 94
121.	Flanegin Hardware Co.....	Steel ceilings.....	1,223 94
122.	Flanegin Hardware Co.....	Special dead locks.....	68 25
123.	Tuttle & Bailey Mfg. Co.....	Iron registers.....	4 45
124.	Barbee Wire & Iron Works.....	Steel partition grilles.....	201 50
125.	D. V. Reedy & Co.....	One hand-power elevator.....	125 00
126.	United States Encaustic Tile Co.....	Floor tile.....	75 73
127.	Thompson Lumber Co.....	Sand lime brick.....	18 90
128.	Pratt & Lambert Co.....	Varnish.....	92 50
129.	Gottlieb Schaefer.....	Sand.....	13 50
130.	The John VanRange Co.....	Steel dish sink.....	34 00
131.	A. P. Flynn.....	Cement.....	46 25
132.	Robert Cromer.....	Cement.....	15 40
133.	C. L. Dilley & Co.....	Lime.....	24 19
134.	E. M. Hoyt, Cashier.....	Freight.....	53 49
135.	Philadelphia & Boston Face Brick Co.....	Mantel tile brick.....	9 13
136.	J. G. Rogers, Med. Supt.....	Mechanics' pay-roll.....	1,272 09
137.	Jas. B. Clow & Sons.....	Water closets.....	437 98
138.	H. W. Johns-Manville Co.....	Conduit for steam pipes.....	246 60
139.	L. Wolf Mfg. Co.....	Bath tubs.....	174 04
140.	The John J. Hildebrandt Co.....	Plumbing fittings.....	158 46
141.	Independent White Lead Works.....	White lead.....	130 00
142.	The Higgin Mfg. Co.....	Window screens.....	526 75
143.	C. A. Eberlein.....	Galvanized iron and tin work.....	69 56
144.	W. H. Porter.....	Painters' supplies.....	91 43
145.	Thompson Lumber Co.....	Red brick.....	10 50
146.	Mrs. J. W. Izor.....	Board for plumbers.....	40 80
147.	Standard Oil Co.....	Turpentine.....	33 75
148.	C. L. Dilley & Co.....	Lime and cement.....	29 25
149.	E. S. Rice & Son.....	Glass and hardware.....	21 05
150.	American Radiator Co.....	Heating material.....	62 70
151.	Harry Tritt.....	Acid and brushes.....	13 48
152.	Gottlieb Schaefer.....	Sand.....	3 00

EXHIBIT No. 6—Continued.

No.	To Whom Paid.	On Account of.	Amount
153.	Stevens Bros.	Transom and cupboard doors	\$9 50
154.	Philadelphia & Boston Face Brick Co.	Red brick	2 80
155.	E. M. Hoyt, Cashier.	Freight	10 12
156.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	568 60
157.	Stevens Bros.	Lumber	196 54
158.	John J. Hildebrandt Co.	Steam and water fittings	67 06
159.	Bishop Elevator Co.	Drain tile	12 69
160.	Mrs. J. W. Izor	Board for plumbers	12 00
161.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	254 78
162.	J. J. Hilbedrandt Co.	Plumbing material	68 50
163.	Benjamin Electric Mfg. Co.	Electrical supplies	46 65
164.	Harry C. Tritt	White lead	37 50
165.	C. M. Webster	Setting up range	16 80
166.	The Varney Electrical Supply Co.	Electrical supplies	16 50
167.	Geo. W. Cann & Co.	Electric wires	10 95
168.	Henry Melton	Services as architect	100 00
169.	Harry Tritt	Paint material	4 37
Total			\$40,000 00
Appropriation			\$80,000 00
Disbursements, 1906			\$40,000 00
Disbursements, 1907			40,000 00 80,000 00

I certify that the above is a correct transcript.

A. W. GAMBLE,
Steward.

EXHIBIT No. 7.

Being a List of Disbursements on Account of Buildings, 1906-7, from the Governor's Emergency Contingent Fund, for the Fiscal Year September 30, 1907.

No.	To Whom Paid.	On Account of.	Amount.
1.	H. W. Johns-Manville Co.	Conduit and pipe covering	\$955 54
2.	J. W. Henderson & Sons	Furniture	811 20
3.	Jas. B. Clow & Sons	Plumbing material	540 72
4.	Indiana Rubber & Insulated Wire Co.	Electric wire	463 69
5.	L. Wolff Mfg. Co.	Plumbing material	391 56
6.	Bramhall Range Co.	Range	174 00
7.	Tiffany Enameled Brick Co.	Enameled brick	111 53
8.	Knight & Jillson Co.	Plumbing material	111 48
9.	Pratt & Lambert Co.	Varnish	92 50
10.	Flanegin Hardware Co.	Steel ceilings	44 37
11.	Varney Electrical Supply Co.	Switch boards	37 64
12.	Bossert Electric Construction Co.	Box covers	20 02
13.	The A. Burdsal Co.	Paints	16 00
14.	Geo. E. Watson Co.	Paint brushes	14 01
15.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	709 88
16.	W. H. Porter	Paints	57 52
17.	J. G. Rogers, Med. Supt.	Mechanics' pay-roll	491 98
18.	J. W. Henderson & Sons	Furniture	332 05
19.	H. Wiler & Co.	House furnishings	276 14
20.	W. H. Porter	Paints	111 45

EXHIBIT No. 7—Continued.

No.	To Whom Paid.	On Account of.	Amount.
21.	Jas. B. Clow & Sons.....	Plumbing material.....	\$92 07
22.	American Telephone Co.....	Telephones.....	50 00
23.	Geo. W. Cann & Co.....	Copper wire.....	43 94
25.	Thompson Lumber Co.....	Lumber.....	38 17
26.	Varney Electrical Supply Co.....	Lock switches.....	34 93
27.	American Watchman's Time Detector Co.....	Electric clocks.....	32 00
28.	Standard Oil Co.....	Turpentine.....	28 13
29.	C. W. Chesnutt.....	Board.....	16 50
30.	Chas. A. Davis.....	Services as electrical engineer..	10 00
31.	J. J. Hildebrandt Co.....	Fittings.....	5 85
32.	L. Wolff Mfg. Co.....	Plumbing material.....	3 93
Total.....			\$6,164 50
Allowance from Governor's Emergency Contingent Fund.....			\$8,000 00
Disbursements			6,164 50
Balance			\$1,835 50

I certify that the above is a correct transcript.

A. W. GAMBLE,
Steward.

SUPPLEMENT TO EXHIBIT No. 8.

Showing Disposition of Superintendent's Contingent Fund at Close of Fiscal Year, September 30, 1907.

Contingent fund \$2,000 00

No.	To Whom Paid.	On Account of.	Amount.
1.	J. G. Rogers, Med. Supt.....	Officers' pay-roll.....	\$958 34
2.	Capital City Dairy Co.....	Butterine.....	120
3.	The Fleischmann Co.....	Yeast.....	9 00
4.	Eberbach & Sons.....	Sphygmograph paper.....	3 00
5.	Standard Oil Co.....	Oils.....	27 38
6.	Fraser Tablet Co.....	Medical charts.....	2 50
7.	Daniel Stewart Co.....	Drugs.....	7 50
8.	Detroit Stoker & Foundry Co.....	Stoker parts.....	15 78
9.	W. A. Morris, Trustee.....	Salary and expenses.....	54 20
10.	Chas. W. Slick, Trustee.....	Salary and expenses.....	65 10
11.	Warren T. McCray, Trustee.....	Salary and expenses.....	56 84
12.	Henry A. Barnhart, Trustee.....	Salary and expenses.....	58 93
13.	Snider & Alber.....	Tableware.....	26 30
14.	H. Wiler & Co.....	Furniture and furnishings.....	230 17
15.	Seybold Dry Goods Co.....	Dry goods.....	104 85
16.	Wiler & Wise.....	Dry goods.....	78 65
17.	Ike Oppenheimer.....	Housekeeping supplies.....	14 87
18.	Flanegin Hardware Co.....	Hardware.....	15 65
19.	C. A. Eberlein.....	Tinware.....	15 05
20.	C. W. Graves.....	Books and baseballs.....	21 56
21.	Logansport Machine Shop & Foundry Co.....	Tools.....	3 75
22.	Rubbertext Cloth & Paper Co.....	Belting.....	10 00
23.	Logansport Carriage Works.....	Blacksmithing.....	2 25

EXHIBIT No. 8—Continued.

No.	To Whom Paid.	On Account of.	Amount.
24.	T. C. Johnson	Watermelons	\$29 90
25.	Harry Tritt	Drugs	11 43
26.	Rice Hardware Co	Hardware	37 08
27.	Geo. A. Schaefer	Horseshoeing	14 00
28.	W. L. Fernald	Lumber	11 04
29.	Elliott Grocery Co	Washboards	3 00
30.	W. I. Shearer & Son	Ice Cream	6 00
31.	Longwell & Cummings	Wrapping paper and stickers	3 25
32.	A. W. Gamble, Steward	Expenses, final settlement	3 15
33.	J. C. White	Chaplain	5 00
34.	A. A. Mainwaring	Chaplain	5 00
35.	D. W. Erb	Organist	4 00
36.	A. Hawkins & Son	Lamb chops	1 75
37.	Western Union Telegraph Co	Telegrams	4 55
38.	Adams Express Co	Expressage	4 10
39.	Logansport Journal	Advertising	2 00
40.	Logansport Times	Advertising	2 00
41.	Logansport Chronicle	Advertising	2 00
42.	Logansport Pharos	Advertising	2 00
43.	Logansport Reporter	Advertising	2 00
44.	E. M. Hoyt, Cashier	Freight	2 65
45.	E. W. Snyder	Watermelons	47 25
46.	John M. Johnston	Stamps	13 98
Total			\$2,000 00

I certify that the above is a correct transcript.

A. W. GAMBLE,
Steward.

EXHIBIT No. 9.

Products of Farm and Garden (Used).

FISCAL YEAR 1906-7.

	Pounds.
Asparagus	605
Beans (green)	8,054
Beans (Lima)	208
Beets	1,255
Blackberries	144
Beef (dressed)	1,623
Cabbage (early)	22,260
Cabbage (late)	20,234
Carrots	2,817
Cauliflower	2,382
Corn	21,769
Celery	1,173
Currants	12
Cucumbers	697
Chives	5

EXHIBIT No. 9—Continued.

Chickens	398
Dill	4
Eggs, dozen	801
Endive	190
Egg plant	68
Ensilage	442,280
Fodder, shocks	105
Grapes	1,297
Gooseberries	155
Horseradish	375
Lettuce	2,263
Milk	252,687
Mangel-wurzel	25,488
Marmalade, quarts	134
Luffas	4
Mint	9
Onions (green)	3,428
Onions (dry)	4,480
Onions (pickled)	78
Okra	30
Potatoes	24,138
Parsnips	3,384
Peas	2,245
Pumpkins	1,181
Parsley	44
Preserves (tomatoes), quarts.....	332
Pickles (cucumber), gallons.....	957
Piccalilli, gallons	100
Popcorn	339
Radishes	3,704
Rhubarb	6,948
Raspberries (red)	3
Raspberries (black)	740
Sugarcane	35,000
Spinach	4,312
Sauerkraut	1,083
Strawberries	757
Sage	14
Tomatoes	10,468
Tomatoes (canned), gallons	197
Turnips	24,356
Thyme	2
Turkeys (live)	65
Water cress	63

EXHIBIT No. 10.

Accounts Charged to Counties for Clothing for the Fiscal Year Ending September 30, 1907.

FISCAL YEAR 1906-7.

County—	
Allen	\$0 32
Cass	326 73
Decatur	1 84
Dekalb	139 08
Elkhart	184 25
Fulton	105 41
Gibson	1 93
Huntington	102 52
Jennings	13 85
Jasper	24 96
Kosciusko	87 41
Laporte	302 63
Lake	125 94
Miami	188 71
Marshall	213 91
Newton	102 37
Noble	126 19
Owen	4 11
Orange	10 39
Pulaski	56 59
Perry	4 50
Porter	160 01
Ripley	6 65
St. Joseph	292 62
Steuben	80 80
Starke	94 33
Vanderburgh	6 80
Wabash	140 15
Whitley	61 06
White	126 94
Total	\$3,093 00

EXHIBIT No. 11.

*Revenue from Sales of Waste Material and other Sources for the Fiscal
Year Ending September 30, 1907.*

CONDENSED SUMMARY.

Rags	\$35 77
Calves	83 00
Garbage	61 25
Egg cases	13 15
Worn-out horse	25 00
Scrap iron	13 72
Medicine for ex-patients	2 00
Old brass	15 20
Old copper	1 44
Old cots	1 50
Old barrels	11 00
Wooden reels	18 00
Total	\$281 03

Special Statistics asked for by the National Conference of Charities and
Correction, 1906.

NORTHERN INDIANA HOSPITAL FOR INSANE.

Population.

FISCAL YEAR 1906-1907.

	<i>Men.</i>	<i>Women.</i>	<i>Total.</i>
Number of inmates present at beginning of fiscal year	448	408	856
Number received during year.....	95	85	180
Number discharged or died during year.....	83	63	146
Number at end of fiscal year.....	452	416	868
Daily average attendance during year.....	448	410	858
Average number of officers and employes during year			181

Expenditures.

FISCAL YEAR 1906-1907.

Current Expenses—

1. Salaries and wages.....	\$56,801 48
2. Clothing	4,268 08
3. Subsistence	39,442 82
4. Ordinary repairs	3,827 84
5. Office, domestic and outdoor expenses.....	33,918 09

Total\$138,258 31

Extraordinary Expenses—

1. New buildings, land, etc.....	\$46,164 50
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Grand total\$184,422 81

FINANCIAL EXHIBIT

OF THE

Southern Indiana Hospital for the Insane

FOR THE FISCAL YEAR ENDING
SEPTEMBER 30, 1907

To the Governor

INDIANAPOLIS

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING

1908

STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
INDIANAPOLIS, February 14, 1908. }

Received by the Governor, examined and referred to the Auditor of State
for verification of the financial statement.

OFFICE OF AUDITOR OF STATE, }
INDIANAPOLIS, February 19, 1908. }

The within report, so far as the same relates to moneys drawn from the
State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

February 19, 1908.

Returned by the Auditor of State, with above certificate, and trans-
mitted to Secretary of State for publication, upon the order of the Board of
Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana,
February 19, 1908.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer February 20, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.

REPORT OF BOARD OF TRUSTEES.

HON. J. FRANK HANLY, Governor of Indiana:

Sir—In accordance with the acts of the General Assembly of 1891, page 361, we present to you the financial report of the Southern Indiana Hospital for the Insane for the fiscal year ending September 30, 1907.

Respectfully,

JOHN T. STOUT,
FRED. F. BAYS,
WILLIAM S. BOGY,
BIRD H. DAVIS,
Board of Trustees.

REPORT OF THE MEDICAL SUPERINTENDENT.

John T. Stout, Fred. F. Bays, William S. Bogy, Bird H. Davis,
Trustees:

Gentlemen—Herewith is submitted to you the financial report
of this Hospital for the year ending September 30, 1907.

Respectfully,

C. E. LAUGHLIN,
Medical Superintendent.

October 7, 1907.

FINANCIAL EXHIBIT

FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

Appropriations, 1906-1907.

RECEIPTS.

Maintenance, fixed	\$95,287 50
Maintenance per capita	4,155 66
	<hr/>
	\$99,443 16
Repairs	\$5,500 00
Clothing	3,666 63
Painting	916 63
Rebuilding and equipment of laundry	12,000 00
Earnings	219 29
Farm products	4,363 42
	<hr/>
	\$126,109 13

DISBURSEMENTS.

Maintenance	\$98,831 08
Balance returned	612 08
	<hr/>
	\$99,443 16
Repairs	5,498 07
Balance returned	1 93
Clothing	3,656 95
Balance returned	9 68
Painting	916 63
Rebuilding and equipment of laundry	11,795 87
Unexpended	204 13
Earnings	219 29
To departments	4,363 42
	<hr/>
	\$126,109 13

POPULATION AND PER CAPITA.

1906-1907.

Average number of patients daily	655.335
Gross per capita	164.77
Per capita, excluding repairs	156.39
Per capita, excluding clothing	159.19
Per capita for clothing	5.58
Per capita for repairs	8.389
Per capita for food	57.568
Per capita for fuel, laundry and outside departments.....	38.611
Per capita for salaries and wages	54.63
Per capita for food each day .....	.1723

PRICES PAID.

1906-1907.

Beans, per bushel.....	\$1.545
Beef, per cwt.....	6.46¾
Butter, per pound.....	.1012
Coffee, per pound .....	.1376
Eggs, per dozen.....	.182
Flour, per barrel.....	4.15
Ham, per pound.....	.1299
Ice, per ton.....	.20
Milk, per gallon .....	.15½
Potatoes, per bushel.....	.65
Sugar, per cwt.....	4.965
Tea, per pound .....	.19
Value of land, buildings and machinery	\$610,599 96
Movable property	71,650 62
	<hr/>
	\$682,250 58

VOUCHERS.

The following is a list of the vouchers approved by the Board of Trustees for the fiscal year ending September 30, 1907, the originals of which, properly signed and sealed, may be found at the office of the Auditor of State, duplicates thereof being on file in the office of the Hospital:

No.	Claimant.	On Account of.	Amount.
1.	W. M. Akin & Son.....	Lard and hams.....	\$202 68
2.	The Cook Grocery Co.....	Eggs, sugar, etc.....	238 10
3.	Morris Co.	Butterine	255 15
4.	Chas. W. Brizius.....	Cornmeal	18 00
5.	Ziliak & Schafer Milling Co.....	Flour	342 00
6.	Shafer & Boeke.....	Milk	325 96
7.	C. F. Jean Co.....	Eggs and poultry.....	168 14
8.	Vickery Brothers	Cheese, syrup, turkeys.....	178 26

VOUCHERS—Continued.

No.	Claimant.	On Account of.	Amount.
9.	Sawyer Biscuit Co.....	Crackers	\$10 46
10.	R. H. Pennington.....	Cabbage	15 31
11.	James L. Keach.....	Potatoes	211 39
12.	Ross W. Weir & Co.....	Tea	44 58
13.	The J. M. Bour & Co.....	Coffee	164 00
14.	Ragon Brothers	Hominy, salt, etc.....	22 97
15.	Reid, Murdoch & Co.....	Cracked wheat, prunes, etc....	135 93
16.	Meyer Brothers Drug Co.....	Tartaric acid, C. soda.....	39 08
17.	J. F. Bomm Drug Co.....	Drugs	10 94
18.	A. Kiefer Drug Co.....	Whisky	10 68
19.	D. & H. Rosenbaum.....	Drugs	22 18
20.	Blackman & Lunkenheimer.....	Jugs, oyster bowls.....	22 68
21.	Eichel Lime & Stone Co.....	Stone screenings	141 36
22.	Henry A. Dreer.....	Flower seed	25 24
23.	Bennett & Hutchinson Co.....	Insurance	250 00
24.	Laib & Co.....	Pulleys	8 90
25.	Chicago White Lead & Oil Co....	Sub-turpentine	17 85
26.	Northern Ohio Blanket Mills.....	Blankets	909 80
27.	Chas. H. Menden.....	Coal	1,126 94
28.	Evansville Gas & E. Light Co....	Coke	82 06
29.	Boetticher, Kellogg Co.....	Screws and brass.....	85
30.	Standard Oil Co.....	Oil and candles	46 31
31.	The National Ammonia Co.....	Ammonia	26 26
32.	M. C. Hunt.....	Chip soap, oxalic acid.....	106 49
33.	H. A. Lensing.....	Cement	38 00
34.	R. L. Sackett.....	Investigation of sewer.....	200 00
35.	Dr. C. E. Laughlin, Med. Supt....	Traveling expenses	18 55
36.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	356 16
37.	Dr. C. E. Laughlin, Med. Supt....	Payroll	3,136 89
38.	Schwarzschild & Sulzberger.....	Beef	1,738 85
39.	W. M. Akin & Son.....	Lard and hams	200 02
40.	Swift & Co.....	Bacon	169 27
41.	Chas. W. Brizius.....	Flour	204 00
42.	Ziliak & Schafer Milling Co.....	Flour	126 00
43.	Sawyer Biscuit Co.....	Crackers	13 35
44.	Wm. J. Moxley.....	Butterine	270 00
45.	C. F. Jean Co.....	Eggs and turkeys.....	264 84
46.	Vickery Brothers	Rice, lemons and cheese.....	100 28
47.	Steele-Wedeles Co.....	Evaporated peaches	99 62
48.	Shafer & Boeke.....	Milk	336 35
49.	The J. M. Bour Co.....	Coffee	168 00
50.	Joe Haas Grocery Co.....	Beans and salt.....	97 80
51.	The Cook Grocery Co.....	Butter, turkeys, etc.....	71 00
52.	Newburgh Tobacco Co.....	Tobacco	131 04
53.	Ragon Brothers	Hominy, sugar, potatoes.....	334 95
54.	Franklin MacVeagh Co.....	Cranberries, metal polish....	154 29
55.	Chas. R. Silkman.....	Rubber sheeting	250 00
56.	J. M. Robinson, Norton Co.....	Toweling, spoons, etc.....	241 64
57.	Carson, Pirie, Scott & Co.....	Bedspreads	129 60
58.	The Hennessey-Robinson Co.....	Napkins, table linen, etc....	111 47
59.	Mackey-Nisbet Co.....	Linen crash	29 12
60.	India Alkali Works.....	Savogram	12 24
61.	Carson, Pirie, Scott & Co.....	Knives, forks, sheeting.....	151 36
62.	U. S. Laundry Machinery Co.....	Acetic acid	2 98
63.	U. S. Laundry Machinery Co.....	Oxalic acid	23 85
64.	M. C. Hunt.....	Chipped soap, caustic soda....	159 40
65.	Frank Prox Co.....	Sewer pipe	124 72
66.	Standard Oil Co.....	Gasoline, engine and cyld. oil.	56 61
67.	C. H. Menden.....	Coal	844 00

VOUCHERS—Continued.

No.	Claimant.	On Account of.	Amount.
68.	John T. Stout.....	Salary and expenses.....	\$111 40
69.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	704 87
70.	Dr. C. E. Laughlin, Med. Supt....	Payroll	3,020 53
71.	Armour & Co.....	Beef, hams, bacon.....	1,616 49
72.	Morris & Co.....	Pork plates	48 24
73.	Reid, Murdoch & Co.....	Rolled oats, wheat, etc.....	173 91
74.	Wm. J. Moxley.....	Butterine	148 50
75.	Iglehart Brothers	Flour	198 00
76.	Franklin MacVeagh & Co.....	Cracked wheat, rice, etc.....	115 50
77.	Sawyer Biscuit Co.....	Crackers	13 35
78.	Shafer & Boeke.....	Milk	336 35
79.	The J. M. Bour Co.....	Coffee	168 00
80.	C. F. Jean Co.....	Poultry	51 30
81.	Lowenthal & Co.....	Eggs, poultry	139 33
82.	W. M. Aikin & Son.....	Lard	305 83
83.	Chas. W. Brizius.....	Corn meal, flour and bran....	144 50
84.	Vickery Brothers	Pepper and lemons.....	7 40
85.	Reid, Murdoch & Co.....	Rolled oats, cheese, etc.....	224 16
86.	Ragon Brothers	Beans, sugar, etc.....	328 62
87.	The Cook Grocery Co.....	Oxalic acid, butter, etc.....	97 52
88.	Boetticher-Kellogg Co.....	Tablespoons and keys.....	10 10
89.	Indiana Reformatory	Brooms	27 84
90.	Laib & Co.....	Pipe, etc.	25 30
91.	Standard Oil Co.....	Turpentine, gasoline, etc.....	147 92
92.	Marble Head Lime Co.....	Lime	97 50
93.	The Sanitas Co.....	Disinfectant	79 65
94.	C. H. Menden.....	Coal	1,092 09
95.	Fred F. Bays.....	Salary and expenses.....	130 15
96.	Dr. C. E. Laughlin, Med. Supt....	Expenses	21 35
97.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	717 72
98.	Dr. C. E. Laughlin, Med. Supt....	Payroll	3,143 34
99.	Armour & Co.....	Hams, bacon, beef, butterine..	1,159 16
100.	Schwarzschild & Sulzberger Co....	Pork plates	48 60
101.	Sawyer Biscuit Co.....	Crackers	13 95
102.	Shafer & Boeke.....	Milk	303 80
103.	Ziliak & Schafer Milling Co.....	Flour	126 00
104.	Paoli Milling Co.....	Flour	247 50
105.	Lowenthal & Co.....	Eggs	102 60
106.	Joe Haas Grocery Co.....	Beans and salt.....	95 88
107.	The Evansville Packing Co.....	Pork plates	44 08
108.	Franklin MacVeagh & Co.....	Rolled oats, cracked wheat, evaporated apples, etc.....	164 71
109.	The Cook Grocery Co.....	Coffee, butter, sugar, etc.....	324 90
110.	Chas. W. Brizius.....	Cornmeal and feed.....	21 75
111.	Reid, Murdoch & Co.....	Rice, peaches, etc.....	210 13
112.	Vickery Brothers	Chickens, axle grease.....	116 19
113.	Ragon Brothers	Scourine, syrup, potatoes....	190 57
114.	Paoli Milling Co.....	Hay	272 07
115.	J. F. Bomm Drug Co.....	Drugs, etc	86 18
116.	Wm. H. Thomas Co.....	Spectacles	5 00
117.	Mackey-Nisbet Co	Napkins	24 50
118.	C. H. Menden.....	Coal	876 12
119.	National Ammonia Co.....	Ammonia	60 40
120.	Peerless Laundry	Laundry work	600 00
121.	M. C. Hunt.....	Wash and caustic soda.....	131 51
122.	M. C. Hunt.....	Alum, soap and soda.....	178 90
123.	L. M. Baird.....	Lime	22 00
124.	The Olds Soap Co.....	Wash soda and Japan wax...	10 20
125.	Dr. C. E. Laughlin, Med. Supt....	Expenses	14 75

VOUCHERS—Continued.

<i>No.</i>	<i>Claimant.</i>	<i>On Account of.</i>	<i>Amount.</i>
126.	S. H. Wulfmann.....	Salary and expenses.....	\$108 65
127.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	472 95
128.	Dr. C. E. Laughlin, Med. Supt....	Pay roll	3,051 41
129.	Armour & Co.....	Hams, butterine and beef.....	1,613 14
130.	Schwarzschild & Sulzberger Co....	Pork plates and bacon.....	137 64
131.	W. M. Akin & Son.....	Lard and beef.....	125 41
132.	Sawyer Biscuit Co.....	Crackers	13 91
133.	Mann Produce Co.....	Eggs	89 70
134.	Lowenthal & Co.....	Eggs, chickens	132 12
135.	Chas. W. Brizius.....	Flour	85 00
136.	J. F. Shafer.....	Milk	336 35
137.	Newburgh Tobacco Co.....	Tobacco	131 04
138.	Ross W. Weir & Co.....	Coffee and tea.....	404 16
139.	Reid, Murdoch & Co.....	Cracked wheat and cheese....	59 10
140.	Steele-Wedeles Co	Rolled oats, prunes, evaporated peaches	165 70
141.	The Cook Grocery Co.....	Butter, lemons, etc.....	36 15
142.	Ragon Brothers	Hominy, beans, rice, etc.....	386 89
143.	Standard Oil Co.....	Oil and turpentine.....	146 07
144.	Standard Oil Co.....	Gasoline, turpentine and wax.	125 29
145.	M. C. Hunt.....	Oxalic acid	24 19
146.	Central Rubber & Supply Co.....	Gaskets, graphite, etc.....	19 30
147.	Peerless Laundry	Laundry work	600 00
148.	The Meyer Hardware Co.....	Knives, nuts, etc.....	54 58
149.	Henry A. Dreer.....	Flower and garden seed.....	112 28
150.	William H. Thomas Co.....	Toweling	60 00
151.	Mackey-Nisbet Co	Oil cloth, sheeting, etc.....	349 13
152.	Chas. H. Menden.....	Coal	788 68
153.	John T. Stout.....	Salary and expenses.....	115 08
154.	Fred. F. Bays.....	Salary and expenses.....	161 60
155.	S. H. Wulfmann.....	Salary and expenses.....	112 10
156.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	316 70
157.	Dr. C. E. Laughlin, Med. Supt....	Payroll	3,034 16
158.	Armour & Co.....	Beef, hams, bacon and lard...	1,415 47
159.	W. M. Akin & Son.....	Beef	50 40
160.	Swift & Co.....	Lard	161 89
161.	Joe Haas Grocery Co.....	Salt and sugar.....	149 70
162.	Steele-Wedeles Co.....	Evaporated peaches	108 12
163.	Wm. J. Moxley.....	Butterine	148 50
164.	Reid, Murdoch & Co.....	Oats, wheat, prunes, etc.....	169 03
165.	Sawyer Biscuit Co.....	Crackers	13 95
166.	James L. Keach.....	Potatoes and onions.....	293 00
167.	John F. Shafer.....	Milk	325 50
168.	Lowenthal & Co.....	Eggs and chickens.....	154 08
169.	Mann Produce Co.....	Eggs	28 80
170.	Ross W. Weir & Co.....	Coffee	180 00
171.	Paoli Milling Co.....	Flour	251 25
172.	Ragon Brothers	Hominy, beans, etc.....	208 24
173.	Knell & Wright	Onions, kraut, etc.....	64 05
174.	The Cook Grocery Co.....	Butter, lemons and pepper....	20 25
175.	Chas. W. Brizius.....	Bran and cornmeal.....	23 25
176.	Carson, Pirie, Scott & Co.....	Combs, toweling, etc.....	106 06
177.	Carson, Pirie, Scott & Co.....	Quilts	88 80
178.	Wm. H. Thomas Co.....	Toweling	7 50
179.	Mackey-Nisbet Co.....	Combs, oilcloth, etc.....	109 82
180.	J. M. Robinson, Norton Co.....	Sheeting, linen, etc.....	286 42
181.	Meyer Brothers Drug Co.....	Drugs	26 60
182.	Wm. B. Burford.....	Stationery and printing.....	397 07
183.	Boetticher-Kellogg Co.....	Lawn mowers, etc.....	77 79

VOUCHERS—Continued.

No.	Claimant.	On Account of.	Amount.
184.	Peerless Laundry	Laundry work	\$750 00
185.	Cudahy Packing Co.....	Soap polish	60 00
186.	The Sanitas Co.....	Disinfectant	79 65
187.	M. C. Hunt.....	Filter Alum	17 41
188.	L. M. Baird's Sons.....	Lime	22 00
189.	The Olds Soap Co.....	Oxalic acid	22 05
190.	Dufendach Hardware Co.....	Steam hose	53 43
191.	The National Ammonia Co.....	Ammonia	90 30
192.	Standard Oil Co.....	Oil and gasoline.....	61 33
193.	Blackman & Lunkenheimer.....	Queensware	22 50
194.	Edward F. Boeke Co.....	Oats and salt.....	114 33
195.	Hirsch Brothers	Corn	157 21
196.	C. H. Menden.....	Coal	717 69
197.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	413 44
198.	Dr. C. E. Laughlin, Med. Supt....	Payroll	2,939 15
199.	Armour & Co.....	Hams, bacon and beef.....	1,397 85
200.	Evansville Packing Co.....	Dry salt pork plates.....	48 00
201.	Morris & Co.....	Lard	151 19
202.	Steele-Wedeles Co.....	Rolled oats and evaporated peaches	133 08
203.	Chas. W. Brizius.....	Cornmeal	18 00
204.	Ross W. Weir & Co.....	Coffee	222 97
205.	Lowenthal & Co.....	Eggs	65 40
206.	The Cook Grocery Co.....	Butter, lemons, etc.....	18 50
207.	The Paoli Milling Co.....	Flour	255 00
208.	Ziliak & Schafer Milling Co.....	Flour	126 00
209.	J. F. Schafer.....	Milk	336 35
210.	Franklin MacVeagh & Co.....	Cracked wheat, rice, evaporated apples, etc	147 62
211.	Durand & Kasper Co.....	Hominy and flour.....	123 39
212.	Ragon Brothers	Syrup and potatoes.....	320 44
213.	Vickery Brothers	Chickens, salt and mops.....	70 58
214.	The Western Surgical Supply Co...	Drugs	10 05
215.	Peter Van Schaack & Sons.....	Filter, alum and drugs.....	23 43
216.	J. F. Bomm Drug Co.....	Drugs	98 66
217.	Mackey-Nisbet Co.....	Ticking, toweling and napkins.	132 35
218.	Peerless Laundry Co.....	Laundry work	600 00
219.	Boetticher-Kellogg Cfo.....	Sash cord, files, etc.....	24 04
220.	The Meyer Hardware Co.....	Files, screws, etc.....	9 28
221.	M. C. Hunt.....	Soda ash	58 18
222.	L. M. Baird Sons.....	Lime	22 00
223.	Marble Head Lime Co.....	Lime	97 50
224.	Standard Oil Co.....	Turpentine, oil, etc.....	169 17
225.	C. H. Menden.....	Coal	436 02
226.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	363 23
227.	Dr. C. E. Laughlin, Med. Supt....	Payroll	2,987 72
228.	Armour & Co.....	Beef and butterine.....	1,267 22
229.	Morris & Co.....	Hams	93 96
230.	Sawyer Biscuit Co.....	Crackers	24 53
231.	W. M. Akin & Son.....	Lard	242 09
232.	Crescent Commission Co.....	Eggs	26 10
233.	Ziliak & Schafer Co.....	Flour	210 00
234.	Lowenthal & Co.....	Eggs and chickens	70 06
235.	Fluhrer Brothers Tobacco Co....	Tobacco	129 78
236.	Ross W. Weir Co.....	Coffee	178 50
237.	J. F. Schafer.....	Milk	325 50
238.	Chas. W. Brizius.....	Bran and flour.....	128 50
239.	Franklin MacVeagh & Co.....	Rice, wheat and matches....	65 25
240.	Ragon Brothers	Potatoes, hominy, etc.....	168 00

VOUCHERS—Continued.

<i>No.</i>	<i>Claimant.</i>	<i>On Account of.</i>	<i>Amount.</i>
241.	Vickery Brothers	Mops	\$11 20
242.	The Cook Grocery Co.....	Butter, cornmeal, etc.....	254 78
243.	Peerless Laundry	Laundry work	600 00
244.	M. C. Hunt.....	Oxalic acid	25 50
245.	The Olds Soap Co.....	Oxalic acid	20 95
246.	Standard Oil Co.....	Gasoline	29 00
247.	J. M. Robinson, Norton Co.....	Hair brushes	12 00
248.	Carson, Pirie, Scott & Co.....	Linen and whisk brooms.....	34 20
249.	William S. Bogy.....	Salary and expenses.....	64 30
250.	John T. Stout.....	Salary and expenses.....	114 06
251.	Samuel H. Wulfmann.....	Salary and expenses.....	30 20
252.	Bird H. Davis.....	Salary and expenses.....	63 80
253.	Fred F. Bays.....	Salary and expenses.....	81 42
254.	C. H. Menden.....	Coal	284 18
255.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	488 03
256.	Dr. C. E. Laughlin, Med. Supt....	Payroll	2,811 48
257.	Armour & Co.....	Beef	1,224 48
258.	Morris & Co.....	Hams, and butterine.....	285 88
259.	J. F. Shafer.....	Milk	336 35
260.	Reid, Murdoch & Co.....	Peaches, apples, lemons.....	191 25
261.	Reid, Murdoch & Co.....	Cracked wheat	16 35
262.	S. Moskowitz Co.....	Poultry and eggs.....	92 88
263.	Lowenthal & Co.....	Eggs	24 43
264.	Mann Produce Co.....	Eggs	20 60
265.	Schwarzschild & Sulzberger Co....	Pork plates and lard.....	206 44
266.	W. M. Akin & Son.....	Lard	39 87
267.	Ross W. Weir & Co.....	Coffee	171 30
268.	Franklin MacVeagh & Co.....	Rice, prunes, peaches.....	204 00
269.	Steele-Wedeles Co.....	Vinegar	4 53
270.	The Cook Grocery Co.....	Butter, cornmeal, etc.....	119 59
271.	Ragon Brothers	Candy, sugar, etc.....	182 86
272.	The Sanitas Co.....	Disinfectant	79 65
273.	Peerless Laundry	Laundry work	750 00
274.	Vickery Brothers	Lime, hominy and mops.....	36 40
275.	Indiana Reformatory	Brooms, pans	80 88
276.	Mackey-Nisbet Co.....	Mosquito bar	41
277.	Standard Oil Co.....	Oil, gasoline and paraffine....	74 30
278.	The Garlock Packing Co.....	Packing	39 26
279.	M. C. Hunt.....	Alum and soda ash.....	70 03
280.	The National Ammonia Co.....	Ammonia	26 26
281.	The Meyer Hardware Co.....	Hooks, wire, etc.....	40 80
282.	Wm. B. Burford.....	Stationery and printing.....	117 68
283.	J. Wooley Coal Co.....	Coal	526 73
284.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	413 51
285.	Dr. C. E. Laughlin, Med. Supt....	Payroll	2,772 17
286.	The Evansville Packing Co.....	Bacon	160 56
287.	The Stacy Cheese Co.....	Cheese	42 28
288.	The Cook Grocery Co.....	Butter	13 50
289.	S. Moskowitz & Co.....	Chickens and eggs.....	93 24
290.	J. F. Shafer	Milk	336 35
291.	Steele-Wedeles Co.....	Vinegar	4 35
292.	The Paoli Milling Co.....	Flour	252 00
293.	Loewenthal & Co.....	Eggs	14 40
294.	Mann Produce Co.....	Eggs	29 25
295.	Schwarzschild & Sulzberger Co....	Lard	144 05
296.	Ziliak & Schafer Milling Co.....	Flour	156 00
297.	The Fluhrer Bros. Tobacco Co....	Tobacco	63 24
298.	Ragon Brothers	Crackers, sugar, etc.....	244 44
299.	Standard Oil Co.....	Turpentine, oil, gasoline.....	127 51

VOUCHERS—Continued.

No.	Claimant.	On Account of.	Amount.
300.	Clifford Hardware Co.....	Shovels, wheelbarrows	\$19 63
301.	Evansville Gas & Electric Light Co.	Coke	68 50
302.	Boetticher-Kellogg Co.....	Saw blades, screws, etc.....	6 48
303.	Peerless Laundry	Laundry work	600 00
304.	The Olds Soap Co.....	Oxalic acid	18 63
305.	J. F. Bomm Drug Co.....	Drugs	16 50
306.	J. M. Robinson, Norton Co.....	Toweling	8 35
307.	Mackey-Nisbet Co	Muslin, pillowcase tubing.....	90 84
308.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	479 36
309.	Dr. C. E. Laughlin, Med. Supt....	Payroll	2,817 57
310.	Armour & Co.....	Beef and butterine	2,427 51
311.	Swift & Co.....	Hams and bacon.....	241 41
312.	W. M. Akin & Son.....	Lard and pork plates.....	163 05
313.	Ziliak & Schafer Milling Co.....	Flour	156 00
314.	Paoli Milling Co.....	Flour	246 00
315.	The Cook Grocery Co.....	Butter and pepper	15 20
316.	J. F. Shafer	Milk	325 50
317.	R. H. Pennington & Co.....	Potatoes, melons, etc.....	80 90
318.	S. Moskowitz & Co.....	Eggs, and poultry.....	119 55
319.	F. W. Hinz & Sons.....	Coffee	292 00
320.	Vickery Brothers	Rice	44 00
321.	Schwarzschild & Sulzberger Co....	Pork plates and lard.....	238 55
322.	Reid, Murdoch & Co.....	Cracked wheat, rice and prunes	125 50
323.	Ragon Brothers	Hominy, sugar, etc.....	923 73
324.	Chas. W. Brizius & Co.....	Bran and meal.....	25 25
325.	Franklin MacVeagh & Co.....	Vinegar and silicon.....	12 75
326.	The Ichenhauser Co.....	Queensware	22 25
327.	The Paul & Ortmeier Co.....	Buckets	3 00
328.	Carson, Pirie, Scott & Co.....	Sheeting	228 00
329.	Mackey-Nisbet Co.....	Sheeting	6 45
330.	Indiana Reformatory	Water coolers	31 80
331.	J. M. Robinson, Norton Co.....	Oilcloth	22 80
332.	Indiana Reformatory	Brooms	27 84
333.	West Disinfecting Co.....	Insect exterminator	43 50
334.	The Worrell Mfg. Co.....	Disinfectant	80 00
335.	The Standard Oil Co.....	Oil and grease.....	38 29
336.	The Olds Soap Co.....	Oxalic acid	19 48
337.	Meyer Bros. Drug Co.....	Alum and soda ash.....	73 72
338.	Peter Van Schaack & Sons.....	Filter alum, T. acid.....	30 23
339.	Cudahy Packing Co.....	Soap polish	24 00
340.	H. A. Lensing.....	Lime	21 25
341.	L. M. Baird Sons.....	Lime	22 00
342.	J. Wooley Coal Co.....	Coal	250 15
343.	J. Wooley Coal Co.....	Coal	366 47
344.	William S. Boggy.....	Salary and expenses.....	93 26
345.	John T. Stout.....	Salary and expenses.....	95 96
346.	Bird H. Davis.....	Salary and expenses.....	100 39
347.	Fred F. Bays.....	Salary and expenses.....	85 84
348.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	132 03
349.	Dr. C. E. Laughlin, Med. Supt....	Payroll	3,099 44

 \$98,831 08

REPAIRS.

The following is a complete list of vouchers paid from the appropriation of repairs, the originals of which are on file at the office of the Auditor of State, duplicates being on file in this office:

No.	Claimant.	On Account of.	Amount.
1.	A. L. Ide & Sons.....	Repairs to engine.....	\$445 57
2.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	89 59
3.	Schnute-Holtman Co.....	Lumber and rubberoid	40 86
4.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	13 80
5.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	127 50
6.	Grote Mfg. Co.....	Valves, etc	59 50
7.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	13 69
8.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	52 04
9.	Jas. B. Clow & Sons.....	Repairs to hoppers.....	101 07
10.	Grote Mfg. Co.....	Repairs to pumps.....	196 06
11.	Crane-Hawley Co.....	Solder, flanges, etc.....	25 42
12.	Laib Co	Clamps, bolts, ells, tees, etc..	88 35
13.	A. L. Swanson.....	Lamps, plugs, etc.....	154 23
14.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	53 35
15.	Henry Vogt Machine Co.....	Repairs to cold storage.....	245 60
16.	The Paul & Ortmeyer Co.....	Tinwork, stack, etc.....	181 30
17.	Theo. E. Rechlin.....	Lumber	39 30
18.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	59 50
19.	Dr. C. E. Laughlin, Med. Supt....	Payroll	134 20
20.	Crane-Hawley Co	Pipe	366 02
21.	Dow Wire & Iron Works.....	Castors and wire mattresses..	30 40
22.	Schnute-Holtman Co	Lumber	74 43
23.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	23 80
24.	Dr. C. E. Laughlin, Med. Supt....	Payroll	135 00
25.	Schnute-Holtman Co	Lumber	19 20
26.	Frank Prox Co.....	Pipe, ells and tees.....	49 89
27.	Crane-Hawley Co.....	Ells, tees, etc.....	220 68
28.	August Schmitt & Sons Co.....	Soil pipe, tees, etc.....	22 80
29.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	8 75
30.	Dr. C. E. Laughlin, Med. Supt....	Payroll	102 09
31.	A. L. Swanson.....	Electrical supplies	2 25
32.	American Laundry Mach. Co.....	Repairs to machinery.....	756 40
33.	Schnute-Holtman Co	Lumber	297 85
34.	Boetticher-Kellogg Co	Repairs to lawn mowers.....	18 27
35.	Grote Mfg. Co.....	Repairs to clutch, etc.....	76 08
36.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	125 22
37.	Dr. C. E. Laughlin, Med. Supt....	Payroll	150 00
38.	Clifford Hardware Co.....	Ladder	9 00
39.	E. C. Johnson	White lead and brushes.....	49 61
40.	Frank Prox Co.....	Wrench, repairs, etc.....	68 15
41.	Dr. C. E. Laughlin, Med. Supt....	Emergent expenses	23 01
42.	Dr. C. E. Laughlin, Med. Supt....	Payroll	214 58
43.	Laib & Co.....	Pipe and fittings.....	533 66

\$5,498 07

CLOTHING.

The following is a complete list of vouchers paid from the appropriation for clothing, the originals of which are on file at the office of the Auditor of State, duplicates being filed in this office:

No.	Claimant.	On Account of.	Amount.
1.	Hinkle Shoe Co.....	Shoes	\$348 90
2.	Progress Clothing Co.....	Men's suits	250 00
3.	Indiana Reformatory	Trousers	200 00
4.	Dr. C. E. Laughlin, Med. Supt....	Payroll	56 50
5.	Mackey-Nisbet Co	Buttons	4 70
6.	J. M. Robinson, Norton Co.....	Handkerchiefs, buttons, etc....	31 72
7.	Boswell Torian	Hats	42 75
8.	Progress Clothing Co.....	Gloves	60 00
9.	Carson, Pirie, Scott & Co.....	Coats, mending cotton.....	32 22
10.	Carson, Pirie, Scott & Co.....	Denim, cheviot, etc.....	212 29
11.	Dr. C. E. Laughlin, Med. Supt....	Payroll	56 50
12.	Mackey-Nisbet Co	Buttons, needles, etc.....	25 12
13.	Dr. C. E. Laughlin, Med. Supt....	Payroll	56 50
14.	Mackey-Nisbet Co	Cheviot, tape and thread.....	58 63
15.	Wm. H. Thomas & Co.....	Grommets	6 00
16.	Dr. C. E. Laughlin, Med. Supt....	Payroll	56 50
17.	Mackey-Nisbet Co	Muslin, gingham, etc.....	271 03
18.	Hinkle Shoe Co.....	Shoes	236 05
19.	Dr. C. E. Laughlin, Med. Supt....	Payroll	50 21
20.	Mackey-Nisbet Co	Handkerchiefs	4 00
21.	D. S. Bernstein	Underwear	125 00
22.	Carson, Pirie, Scott & Co.....	Shirting, calico, etc.....	136 62
23.	Dr. C. E. Laughlin, Med. Supt....	Payroll	56 50
24.	Wm. H. Thomas & Co.....	Men's hose	95 00
25.	Hinkle Shoe Co.....	Shoes	207 00
26.	Mackey-Nisbet Co	Calico, pants, etc.....	110 49
27.	Dr. C. E. Laughlin, Med. Supt....	Payroll	42 95
28.	Carson, Pirie, Scott & Co.....	Grommets	4 84
29.	J. M. Robinson, Norton Co.....	Hose, braces, etc.....	94 11
30.	Mackey-Nisbet Co.....	Calico, muslin, etc.....	122 06
31.	Dr. C. E. Laughlin, Med. Supt....	Payroll	36 50
32.	Mackey-Nisbet Co	Buttons and thread.....	48 72
33.	Dewenter & Co	Straw hats	15 00
34.	Dr. C. E. Laughlin, Med. Supt....	Payroll	36 50
35.	J. M. Robinson, Norton Co.....	Pins and thread	10 54
36.	Dr. C. E. Laughlin, Med. Supt....	Payroll	36 50
37.	Mackey-Nisbet Co	Calico and underwear.....	291 93
38.	Carson, Pirie, Scott & Co.....	Shirts and gingham, etc.....	127 07

\$3,656 95

PAINTING.

The following is a list of vouchers paid from the appropriation for painting, the originals of which are on file at the office of the Auditor of State:

No.	Claimant.	On Account of.	Amount.
1.	Dr. C. E. Laughlin.....	Payroll	\$73 34
2.	E. C. Johnson.....	Varnish, glass, etc.....	7 76
3.	Dr. C. E. Laughlin.....	Payroll	75 00
4.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	25 00
5.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	45 17
6.	Chicago White Lead & Oil Co....	Brushes and white lead.....	83 33
7.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	89
8.	Dr. C. E. Laughlin, Med. Supt....	Payroll	50 00
9.	Dr. C. E. Laughlin, Med. Supt....	Payroll	50 00
10.	E. C. Johnson	Zinc and bronze.....	31 00
11.	Dr. C. E. Laughlin, Med. Supt....	Payroll	50 00
12.	Chicago White Lead & Oil Co....	White lead	71 40
13.	Dr. C. E. Laughlin, Med. Supt....	Contingent expenses	14 34
14.	Dr. C. E. Laughlin, Med. Supt....	Payroll	50 00
15.	Dr. C. E. Laughlin, Med. Supt....	Payroll	48 33
16.	E. C. Johnson	White lead	143 48
17.	Dr. C. E. Laughlin, Med. Supt....	Payroll	51 62
18.	E. C. Johnson	Bronze and white lead.....	45 97
			<hr/> \$916 63

SPECIFIC.

REBUILDING AND EQUIPMENT OF LAUNDRY.

The following is a list of vouchers paid from the appropriation for rebuilding and equipment of laundry, the originals of which are on file at the office of the Auditor of State:

No.	Claimant.	On Account of.	Amount.
1.	Scarborough & Davis Co.....	Rebuilding laundry	\$2,500 00
2.	Scarborough & Davis Co.....	Work and material	5,000 00
3.	Scarborough & Davis Co.....	Laundry building	1,720 00
4.	American Laundry Mach. Co.....	Mangle and doors	1,548 50
5.	A. L. Swanson.....	Electrical supplies	149 73
6.	Peru Basket Co.....	Laundry baskets	156 95
7.	Foster Engineering Co.....	Pressure regulator	24 80
8.	Laib Co	Power blower	16 00
9.	Hide, Leather & Belting Co.....	Belts and pulleys	183 77
10.	Simplex Electric Heating Co.....	Repairs to irons	60 16
11.	Evansville Gas & Electric Lgt. Co..	Electrical supplies	19 07
12.	August Schmitt & Sons Co.....	Dry rooms	177 49
13.	F. J. Schlotter	Architect	184 40
14.	Chas. J. Tagliabue.....	Regulator	55 00
			<hr/> \$11,795 87

SUMMARY.

Maintenance vouchers paid and filed	\$98,831 08
Repairs vouchers paid and filed	5,498 07
Clothing vouchers paid and filed	3,656 95
Painting vouchers paid and filed	916 63
Rebuilding and equipment of laundry vouchers paid and filed..	11,795 87
	<hr/>
	\$120,698 60

The total amount expended, \$120,698.60, distributes to the following accounts:

Acid, acetic	\$2 98
Acid, muriatic	20
Acid, oxalic	228 82
Acid, tartaric	76 55
Adrenlin	5 35
Advertising	116 85
Alcohol	16 26
Alum, filter	125 79
Ammonia	206 34
Ammonia, bromide	9 70
Ammonia, sal.	20
Apples	12 00
Apples, dried	441 25
Apricots	1 00
Architect, service	184 40
Arnica	1 20
Asparagus	2 75
Bacon	919 07
Bananas	16 59
Band, suspensory	1 80
Bands, rubber	4 80
Barber's clippers	2 50
Baseball supplies	3 00
Baking powder	42 48
Baskets, laundry	156 95
Beans	429 63
Beans, green	3 40
Beans, canned	30
Bedspreads	222 00
Beef	11,609 21
Beef, chipped	35
Beef extract	40
Belt fasteners	9 30
Belts, ladies'	10 83
Belting	206 69
Bits, auger	85
Bits for horses	30

Blacking	\$5 25
Blankets	909 80
Blank forms, etc.	214 77
Blotters	1 89
Blower	16 00
Blue prints	3 60
Bolts	110 06
Books	4 50
Books, invoice	4 00
Borax	3 25
Bottles, hot water	1 80
Bowls, oyster	14 40
Bran	32 25
Brass, sheet	60
Bread	18 00
Bronze	18 00
Brooms	111 36
Brooms, whisk	19 80
Brown mixture	22 50
Brushes, barber's	90
Brushes, counter	50
Brushes, hair	12 75
Brushes, paint	31 85
Brushes, scrub	11 20
Buckets	10 00
Buckwheat	2 00
Butter	146 40
Butterine	2,352 81
Buttons	37 59
Buttons, collar	8 76
Cabbage	19 51
Campho phenique	5 38
Cans, coffee	1 60
Calico	189 22
Candles	7 90
Candy	39 71
Canopy bar	41
Capsules	2 02
Canteloupes	10 25
Casters	5 50
Castings	4 06
Cement, shoe	50
Celery	6 20
Cement	41 50
Cement, belting	50
Cement, smooth on	1 75
Chalk	25
Cheese	244 88
Cherries, canned	1 75
Cheviots	306 84

Chickens	\$896 12
Chisels	1 35
Chocolate	40
Cigars	9 00
Cinnamon	4 92
Citron	15
Clamps, basin	1 40
Clay	4 00
Cloves	55
Coffee	2,098 48
Coffee, strainers	35
Coats, men's	31 32
Coal	7,309 07
Coal, smithing	2 40
Coal tar	50
Coke	156 48
Collars	3 25
Collanders	15
Combs	23 60
Corks	1 88
Copperas	50
Corn for stock	157 21
Corn meal	176 00
Cotton, absorbent	6 25
Corn, pop	3 00
Cord, sash	4 20
Corsets	8 42
Cotton, darning	90
Cottonade	111 63
Couplings	25 31
Crackers	165 04
Cranberries	32 50
Cream of tartar	13 10
Cruets, salt and pepper	2 10
Cucumbers	1 50
Cups and saucers	3 90
Cup, oil	1 20
Currants	50
Curtains, fixtures	2 08
Curry combs	30
Dials, watchman's	6 86
Diamond dust	55
Dippers, tin	1 15
Discs	4 00
Dishes, vegetables	18 00
Disinfecting fluid	368 45
Document boxes	8 40
Dolls	3 38
Drills	34 15
Eggs	983 98

Electrical supplies	\$248 48
Elevator	150 00
Ells and tees	97 20
Emery	1 00
Emery cloth	40
Envelopes	24 86
Escaped patient	8 12
Expressage	49 48
Extract, lemon	1 25
Extract, vanilla	2 30
Fasteners	1 20
Ferrules	1 50
Figs	60
Files	28 67
Fire extinguishers	50 00
Fish	5 78
Fittings for engineers.....	23 80
Flanges	97 76
Flour	3,343 75
Flour, graham	70
Force cups	6 00
Freight	294 08
Garters	1 08
Gaskets	16 95
Gasoline	178 53
Gauges, steam	11 85
Gauze	9 97
Gelatine	1 40
Ginghams	93 23
Glass	93
Glass cutters	75
Glass gauges	1 92
Gloves, men's	60 00
Glycerine	7 00
Graphite	1 75
Grease, axle	1 20
Grease, cup	85
Grinding plow points	2 50
Grommets	19 65
Guimp	2 00
Hacksaws	5 95
Hammers	7 00
Hams	896 94
Handkerchiefs	13 00
Hangers, pipe	15 40
Hatchets	3 05
Hats, felt	42 75
Hats, straw	15 00
Hay	287 90
Hinges	40

Hominy flakes	\$106 99
Hook plates	2 10
Hooks, clothing	20 05
Horseshoeing	42 40
Hosiery, men's	95 00
Hosiery, women's	68 11
Hose, garden	9 00
Hose, fire	138 40
Hose, steam	53 43
Hyoscine, sulphate	13 60
Ice	17 60
Ice cream	32 50
Ink, indelible	37 00
Ink	12 00
Ink, shoemaker's	30
Insect exterminator	43 50
Insurance	250 00
Inspection and report on sewer plant.....	200 00
Iodine	80
Iron	23 74
Iron, angle	7 73
Iron trap	50
Jars, slop	25 09
Jewelry (for Christmas presents).....	58 32
Journal, medical	6 00
Jugs	8 28
Kettles, tea	50
Keyrings	3 00
Keys	125 70
Knives and forks	28 80
Knives, butcher's	90
Knives, paring	1 20
Knives, shoe	15
Kraut	24 00
Labels	5 33
Laces, shoe	25 55
Ladders	12 24
Lamp, arc	27 80
Lamps, incandescent	101 88
Lard	1,944 04
Laundry building	9,220 00
Laundry work	4,500 00
Lead, white	319 81
Leather, patching	3 91
Leather, sole	35 53
Lemons	68 90
Lettuce	3 15
Lime	235 06
Lumber	467 14
Macaroni	17 25

Mangle, dry house doors, etc.....	\$1,725 99
Matches	15 00
Medical books	7 00
Metal polish	31 44
Milk	3,624 36
Mitts, restraint	32 50
Mops	34 80
Mopsticks	3 40
Moth balls.....	2 50
Mowers, lawn	51 00
Mouse traps	1 80
Music, sheet	1 40
Mucilage	3 00
Mules	250 00
Muslins	480 23
Mustard	3 00
Mustard leaves	1 02
Nails	5 10
Nails, shoe	2 22
Napkins	90 38
Neckwear	7 50
Needles	2 56
Needles, darning	11
Needles, graphophone	60
Needles, surgical	30
Newspapers	12 80
Nipples	1 25
Nuts	23 32
Oats	107 73
Oats, rolled	100 13
Oilers	60
Oil cloth	62 40
Oil, cylinder	164 16
Oil, engine	114 51
Oil, linseed	21 91
Oil, neats foot	2 55
Oil, olive	85
Oil, soap	52 08
Ointment	80
Olives	45
Onions	39 65
Opium, campho	80
Opium, tincture	80
Orchestra, employed	288 10
Orchestra, hospital	52 00
Oranges	17 95
Ornaments for Christmas tree	2 60
Overalls	28 50
Oysters	11 05
Packing	39 26

Pad, scratch	\$3 86
Pans, bread	25 20
Pad, zinc collar	1 00
Pans, dish	4 52
Paints	9 65
Pans, galvanized	3 00
Pans, dust	2 40
Paper bags	1 60
Paper, manilla	40
Papers, powder	20
Paper, sand	3 37
Paper, tracing	6 25
Paper, typewriter	13 90
Paraffine	47 63
Paregoric	1 00
Peaches, dried	1,054 00
Peanuts	19 98
Peas, canned	1 75
Pencils, lead	5 64
Pens, steel	10 44
Pepper	16 30
Pen holders	3 00
Pens, marking	2 50
Peroxide hydrogen	2 00
Phaenacetine	3 00
Pickles	20
Pineapples	60
Pins	41 28
Pipe, cast iron	89 65
Pillows	38
Pins, tumbling	1 50
Pipe, lead	3 60
Pipe, galvanized	148 19
Pipe, sewer	129 00
Pipe, iron	620 36
Plasters	17 54
Plaster paris	4 20
Plates	2 40
Plates, heel	1 90
Plugs	1 10
Pork plates	453 56
Postage stamps	176 00
Pot, glue	50
Potash acetate	40
Potash, bicarbonate	30
Potash, bromide	7 00
Potatoes	1,041 21
Potatoes, seed	102 63
Potatoes, sweet	1 38
Potatoes, sweet, seed	16 60

Powders, Seidlitz	\$0 75
Prunes	520 70
Pulleys	31 84
Pumpkins, canned	15
Punches	25
Putty	4 00
Quinine	15 15
Radiators	25 00
Radishes	25
Raisins	75
Rakes	5 00
Rasp, shoe	70
Records, graphophone	20 40
Regulator, speed	24 80
Rental, postoffice box	5 00
Repairs, armature	66 89
Repairs, bath tub	4 85
Repairs, belt	2 53
Repairs, clippers	4 55
Repairs, elevator	2 90
Repairs, guttering	80 00
Repairs, harness	5 60
Repairs, hoppers	155 07
Repairs, laundry machinery	843 71
Repairs, lawn mowers	26 67
Repairs, machinery	502 38
Repairs, mowing machine	4 65
Repairs, plumber's furnace	1 75
Repairs, pumps	94 74
Repairs, refrigerator machinery	279 91
Repairs, sewing machine	9 35
Repairs, slash bar	65
Repairs, swill cart	3 50
Repairs, syringes	1 25
Repairs, tinware	1 55
Repairs, vehicles	30 50
Repairs, water softener	1 60
Reports, printing of	162 64
Ribbons	23 41
Ribbon, typewriter	2 10
Rice	399 77
Rope	5 76
Rubber	2 40
Rubber, roofing	4 50
Rubber, sheets	250 00
Salad dressing	45
Salaries of attendants	15,208 06
Salaries of carpenters and painters.....	1,489 27
Salaries of general employes and domestics.....	12,733 82
Salaries of officers	7,443 26

Salaries of trustees	\$1,025 00
Salt	40 40
Salts, Rochelle	5 75
Sardines	3 73
Savogran	12 24
Saws	3 65
Scourine	113 90
Screws	5 15
Scythes	4 15
Scythe stones	20
Seed, flower	43 84
Seed, garden	93 68
Seine	13 00
Shafting	23 25
Shears and scissors	1 00
Sheeting	825 91
Shoes, men's	426 55
Shoes, women's	365 40
Shoes, mules	28 80
Shovels	2 63
Shirts, men's	18 00
Sickles	1 25
Sieves	70
Silicon	26 00
Slate	7 50
Spectacles	5 00
Smoke stack, for kitchen	100 00
Soap, chipped	366 53
Soap polish	60 00
Soda	2 24
Soda ash	334 36
Soda, bromide	8 55
Soda, caustic	67 48
Soda, Wyandotte	18 24
Sponges	1 05
Solder	7 87
Starch	36 27
Spoons	59 20
Spices	1 00
Strawberries	4 95
Strap, razor	1 50
Straw	126 81
Stone screenings	141 36
Stretchers, shoe	1 50
Sugar, granulated	2,134 30
Sugar, powdered	90
Sulfonal	27 75
Suits, men's	250 00
Suspenders	12 50
Syrup	639 94

Tablets	\$43 09
Tablets, neuralgia	1 60
Tacks	1 70
Tampers	1 00
Tape, marking	8 82
Tea	140 00
Telegrams	22 63
Telephone	110 00
Telephone, tolls	59 65
Thermometers	3 00
Thread	130 02
Thread, shoe	1 35
Ticking	141 97
Tomatoes, fresh	3 35
Tonics	32 00
Transportation, choir	5 00
Tobacco	486 06
Towels	26 14
Toweling, crash	193 89
Trousers	220 00
Tumblers	4 80
Turkeys	220 98
Turnips	45
Turpentine	530 54
Turpentine, Japan	8 25
Turpentine, sub	17 85
Traveling expenses	519 81
Tree, Christmas	3 00
Underwear	358 33
Valves	149 00
Varnish	1 55
Vaseline	2 20
Veterinary's service	2 50
Vinegar	32 25
Vitriol, blue	2 40
Wagonette, rental of.....	4 00
Wash bowls and pitchers.....	14 15
Washers	80
Water coolers	34 80
Watermelons	45 00
Wax, Japan	4 12
Wax, shoe	05
Wax, white	40
Wheat, cracked	165 30
Wheelbarrows	9 75
Whetstone	15
Whiskey	12 68
Wigs, rent of.....	1 60
Wire	1 10
Wire mats for beds	26 40

Wire screens	\$9 90
Wrenches	29 95
Yeast	90 00
Zinc in oil.....	27 00
	<hr/>
	\$120,954 09
Deduct cartage, containers and discount.....	255 49
	<hr/>
	\$120,698 60

DISTRIBUTION OF MAINTENANCE—ADMINISTRATION.

Salaries and Wages—

Attendants	\$15,208 06
Officers	7,168 26
Other employes	12,399 75
Trustees	1,025 00

Subsistence—

Breadstuffs, beans, cereals, etc.....	5,090 77
Butter, eggs and poultry.....	4,582 04
Canned goods	16 13
Fish and oysters	16 83
Fruits, dried	1,975 89
Fruits, fresh	159 65
Meats fresh	11,609 21
Meats, salted and lard.....	4,213 61
Milk	3,624 36
Other food supplies	341 77
Tea, coffee and sugar.....	4,332 74
Vegetables	1,091 64
Vinegar and syrup.....	672 19

Sundries—

Engineer's supplies	837 25
Freight and transportation.....	871 49
Fuel and light	7,488 45
Furniture, fixtures, bedding and other household equipment.	3,816 43
Ice	17 60
Insurance	250 00
Laundry supplies, soaps and other cleansers.....	6,533 88
Library, newspapers and periodicals.....	25 80
Medicines, instruments and other sick ward supplies.....	752 97
Music and amusements	620 23
Other classifications	1,464 71
Postage, telegraph, telephone.....	373 28
Stable, farm and provender.....	1,142 36
Stationery and printing	643 31
Tobacco	465 42

\$98,831 08

DISTRIBUTION TO REPAIRS.

Labor	\$930 37
Material	4,567 70
	<hr/>
	\$5,498 07

DISTRIBUTION TO CLOTHING.

Clothing	\$2,044 16
Miscellaneous	485 16
Shoes	791 95
Tailor and sewing room supplies.....	335 68
	<hr/>
	\$3,656 95

DISTRIBUTION TO PAINTING.

Paints, etc.	\$916 63
	<hr/>
	\$916 63

DISTRIBUTION TO REBUILDING AND EQUIPMENT OF LAUNDRY.

Building	\$9,581 89
Equipment	2,213 98
	<hr/>
	\$11,795 87

By act of the General Assembly of 1905 the maintenance of this Hospital was placed at \$103,950, with \$160 per capita per annum for each person present over an average of 627. By act of the General Assembly of 1907 the fiscal year was closed on September 30th, instead of October 31st, and but eleven-twelfths of this sum was available.

The daily attendance by months was as follows:

1906.

November	648.600
December	652.000

1907.

January	653.387
February	656.392
March	664.161
April	660.200
May	657.451
June	656.433
July	653.935
August	654.258
September	651.866
Total present over an average of 627.....	28.335
Fixed appropriation (11-12 of \$103,950).....	\$95,287 50
Per capita appropriation	4,155 66

Total maintenance available for the fiscal year (11 months) ..\$99,443 16

EXPENDITURES BY MONTHS.

Months.	Mainte- nance.	Repairs.	Clothing.	Painting.	Rebuilding and Equipment of Laundry.
1906					
November	\$8,930 15	\$535 16	\$855 40	\$73 34	.....
December	10,453 45	54 66	440 18	82 76	.....
1907					
January	9,609 96	127 50	81 62	70 17	.....
February	9,084 46	73 19	121 13	134 22	.....
March	9,735 47	52 04	557 29	50 00	.....
April	10,386 03	618 48	322 12	81 00	\$2,500 00
May	8,466 00	659 90	455 44	135 74	.....
June	7,854 59	629 65	257 51	48 33	5,000 00
July	8,148 89	423 41	100 22	195 10	3,268 50
August	5,807 03	1,426 07	47 04	.....	591 41
September	10,355 05	898 01	419 00	45 97	435 96
Total	\$98,831 08	\$5,498 07	\$3,658 95	\$916 63	\$11,795 87
Balance returned	612 08	1 93	9 68	.....	204 13
	\$99,443 16	\$5,500 00	\$3,666 63	\$916 63	\$12,000 00

EARNINGS.

Sale of rags, bones and refuse iron.....	\$219 29	
Turned over to State Treasurer.....		\$219 29
	<hr/>	<hr/>
	\$219 29	\$219 29

FARM AND GARDEN, 1906-1907.

PRODUCTS.

Beans, 730 bushels	\$418 00
Beans, butter, 16 gallons.....	9 60
Beets, 430 dozen	80 60
Blackberries, 6 gallons	2 00
Cabbage, 447 dozen	223 50
Carrots, 206 dozen	30 90
Cauliflower, 83 heads	4 15
Corn, 748 bushels	341 10
Corn (green), 2,394 dozen	205 18
Fish, 294 pounds	35 78
Fodder, 540 shocks	54 00
Grapes, 111 pounds	5 55
Greens, turnips, 82 bushels.....	24 60
Hay, 4.775 tons	66 85
Kale, 130 dozen	45 50
Kohlrabi, 100 dozen	19 45
Lettuce, 452 Bushels	147 40
Mangoes, 36 dozen	10 80
Onions (green), 3,480 dozen.....	970 50
Peas, 160¼ bushels	128 63
Pork, 11,861 pounds	734 69
Potatoes, 507 bushels.....	350 20
Potatoes (sweet), 114 bushels.....	91 20
Radishes, 464 dozen	75 64
Rhubarb, 814 dozen	178 50
Tomatoes, 119 bushels	60 80
Turnips, 112 bushels	48 30
	<hr/>
	\$4,363 42

DISTRIBUTION.

General kitchen	\$3,760 35
Officer's kitchen	141 12
Stable, barn and piggery.....	461 95
	<hr/>
	\$4,363 42

CHARGES.

Stock and property September 30, 1907.....	\$1,050 00
Hogs	383 59
Seeds and plants	238 15
Blacksmithing	31 30
Feed	284 63
Wages	769 25
<hr/>	
Total	\$2,756 92
Garbage	481 25
<hr/>	
Total	\$3,238 17
Stock and property	\$1,050 00
Hogs	383 59
Products	4,363 42
<hr/>	
	\$5,797 01
Deduct charges	3,238 17
<hr/>	
	\$2,558 84

INVENTORY.

1906-1907.

Grounds, buildings and machinery.....	\$610,599 96
Movable property—	
Offices and libraries.....	\$3,240 58
Reception rooms	654 97
Superintendent's quarters	2,248 35
Superintendent's and officers' dining rooms.....	468 58
Superintendent's and officers' kitchen	326 92
Officers' quarters	1,570 52
Dispensary and surgery	1,767 79
Employees' quarters	4,612 98
Employees' dining room	488 27
General kitchen	3,355 00
Bakery	50 00
Assembly room	1,326 32
Sewing rooms and marking room.....	403 50
Laundry	47 01
Ward property	44,484 95
Power and motor house.....	700 00
Carpenter and paint shop.....	395 15
Stables	1,700 00
Farm	1,050 00
Hogs	383 59
Tools, benches on ground.....	540 00
In store	1,836 14
<hr/>	
Total	71,650 62
<hr/>	
Grand total	\$682,250 58

... THE ...

THIRTY-THIRD ANNUAL REPORT

OF

PURDUE UNIVERSITY

FOR

THE YEAR ENDING JUNE 30, 1907

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.
1907.

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
INDIANAPOLIS, November 16, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, December 6, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

DECEMBER 6, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, December 6, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer December 6, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

LETTER OF TRANSMITTAL.

HON. J. FRANK HANLY, *Governor of Indiana:*

I herewith transmit the report of the President of Purdue University for the year ending June 30, 1907; also the annual financial statements of the Secretary and Treasurer of the institution.

Yours respectfully,

ADDISON C. HARRIS,
President of the Board of Trustees.

To the Board of Trustees of Purdue University:

Herewith are submitted the annual reports of the President and other officers of Purdue University for the year ending June 30, 1907, as required by the Act of Congress of July 2, 1862, under which the institution was organized. The report includes:

1. The organization of the Board of Trustees, the Instructional Corps, the Experiment Station, and the Farmers' Institutes.
2. A brief history and description of the University.
3. A report on the attendance during the year.
4. A report on the work and progress of the University for the year.
5. A report on improvements and additions to equipment, including gifts.
6. The Memorial Building.
7. The Experiment Station.
8. A report on Farmers' Institutes.
9. The needs of the University.
10. A financial report.

Very respectfully,

WINTHROP E. STONE,
President of the University.

November 10, 1907.

BOARD OF TRUSTEES.

JAMES M. BARRETT.....	Fort Wayne
DAVID E. BEEM.....	Spencer
CHARLES DOWNING	Greenfield
ADDISON C. HARRIS.....	Indianapolis
*GEORGE A. JAMISON.....	LaFayette
SYLVESTER JOHNSON	Irvington
CHARLES MAJOR	Shelbyville
HENRY A. MILLER.....	Montmorenci
JOSEPH D. OLIVER.....	South Bend
†WILLIAM V. STUART.....	LaFayette

Officers of the Board.

†WILLIAM V. STUART.....	President
‡ADDISON C. HARRIS.....	President
DAVID E. BEEM.....	Vice-President
EDWARD A. ELLSWORTH.....	Secretary
JAMES M. FOWLER.....	Treasurer

Executive Committee.

JAMES M. BARRETT,	CHARLES MAJOR,
WILLIAM V. STUART.	

Auditing Committee.

SYLVESTER JOHNSON,	DAVID E. BEEM,
CHARLES DOWNING.	

Committee on Agriculture.

ADDISON C. HARRIS,	CHARLES DOWNING,
HENRY A. MILLER.	

Committee on Horticulture.

SYLVESTER JOHNSON,	DAVID E. BEEM,
JOSEPH D. OLIVER.	

*Appointed May, 1907.

†Term expired May, 1907.

‡From June 12, 1907.

CORPS OF ADMINISTRATION AND INSTRUCTION, 1906-1907.

WINTHROP ELLSWORTH STONE, PH. D., LL. D.,
PRESIDENT OF THE UNIVERSITY.

STANLEY COULTER, PH. D.,
SECRETARY OF THE FACULTY.

ALFRED MONROE KENYON, A. M.,
REGISTRAR.

EDWARD AUGUSTUS ELLSWORTH,
BURSAR.

WILLIAM MURRAY HEPBURN, A. M.,
LIBRARIAN.

Faculty.

THOMAS GREENE ALFORD, A. M., Professor of Mathematics.

JOSEPH CHARLES ARTHUR, D. Sc., Professor of Vegetable Physiology
and Pathology.

EDWARD AYRES, A. M., Professor of Rhetoric.

CHARLES HARRISON BECKETT, A. B., Assistant Professor of Mathe-
matics.

SEVERANCE BURRAGE, S. B., Associate Professor of Sanitary Science.

STANLEY COULTER, Ph. D., Professor of Biology; Director of Biological
Laboratory.

ROBERT ALEXANDER CRAIG, D. V. M., Professor of Veterinary Science.

PAULINE MARIOTTE-DAVIES, Ph. D., Professor of French.

JOHN WALTER ESTERLINE, B. S., Associate Professor of Electrical En-
gineering.

PERCY NORTON EVANS, Ph. D., Professor of Chemistry; Director of
Chemical Laboratory.

¹EMILE JEROME FERMIER, M. E., Assistant Professor of Applied Me-
chanics.

ERVIN SIDNEY FERRY, B. S., Professor of Physics.

MARTIN LUTHER FISHER, B. S., Assistant Professor of Agronomy.

ERNEST JACOB FLUEGEL, Ph. D., Professor of German.

LAURA ANNE FRY, Professor of Industrial Art.

¹Resigned October 10.

- HARRY OTTO GARMAN, C. E., Assistant Professor of Civil Engineering.
- MICHAEL JOSEPH GOLDEN, M. E., Professor of Practical Mechanics.
- ARTHUR GOSS, M. S., A. C., Professor of Agricultural Chemistry; Director of Agricultural Experiment Station.
- WILLIAM FREEMAN MYRICK GOSS, M. S., D. E., Professor of Experimental Engineering; Director of Engineering Laboratory; Dean of Schools of Engineering.
- ARTHUR LAWRENCE GREEN, Ph. C., Ph. D., Dean and Professor of Chemistry in School of Pharmacy.
- EDWARD LEE HANCOCK, M. S., Assistant Professor of Applied Mechanics.
- IVY FRANCES HARNER, M. S., Professor of Household Economics.
- WILLIAM KENDRICK HATT, C. E., Ph. D., Professor of Civil Engineering; Director of Materials Testing Laboratory.
- BENJAMIN MARTIN HOAK, Ph. G., Assistant Professor of Materia Medica.
- JAMES DAVID HOFFMAN, M. E., Associate Professor of Engineering Design.
- OTTO FRED HUNZIKER, M. S. A., Associate Professor of Dairying.
- ALPHA PIERCE JAMISON, M. E., Assistant Professor of Mechanical Drawing.
- ARTHUR TABER JONES, B. S., Assistant Professor of Physics.
- ALFRED MONROE KENYON, A. M., Professor of Mathematics.
- WILLIAM CARROLL LATTA, M. S., Professor of Agriculture.
- LLEWELLYN LUDY, M. E., Professor of Mechanical Engineering.
- WILLIAM JAMES LUTZ, M. S., Captain 28th Infantry, U. S. A., Professor of Military Science and Tactics; Commandant of Cadets.
- EMMA MONT. McRAE, A. M., Professor of English Literature; Lady Principal.
- CHARLES PHILO MATTHEWS, M. E., Ph. D., Professor of Electrical Engineering; Director of Electrical Laboratory.
- THOMAS FRANCIS MORAN, Ph. D., Professor of History and Political Economy.
- HYLON THERON PLUMB, B. S., E. E., M. S., Associate Professor of Electrical Engineering.
- JAMES HARVEY RANSOM, Ph. D., Associate Professor of Chemistry.
- ²ROBERT LEMUEL SACKETT, B. S., C. E., Professor of Municipal and Sanitary Engineering.
- ³CHARLES VICTOR SEASTONE, B. S., Associate Professor of Sanitary Engineering.
- JOHN HARRISON SKINNER, B. S., Professor of Animal Husbandry.
- ALBERT SMITH, B. S., C. E., Associate Professor of Civil Engineering.
- CHARLES MARQUIS SMITH, B. S., Assistant Professor of Physics.

²Under appointment to take effect in full September 1, 1907.

³Resigned January 1, 1907.

MOSES COBB STEVENS, A. M., Professor of Higher Mathematics. (Emeritus.)

JULIUS WILLIAM STURMER, Ph. G., Professor of Pharmacy.

WALTER OWEN TEAGUE, S. B., Assistant Professor of Experimental Engineering.

ERASTUS TEST, M. S., M. D., Professor of Mathematics.

ALANSON NILES TOPPING, B. S., Assistant Professor of Electrical Engineering.

JAMES TROOP, M. S., Professor of Horticulture and Entomology.

WILLIAM PAYSON TURNER, Assistant Professor of Practical Mechanics.

CLARENCE ABIATHAR WALDO, Ph. D., Head Professor of Mathematics.

JACOB WESTLUND, Ph. D., Associate Professor of Mathematics.

ALFRED THEODOR WIANCKO, B. S. A., Associate Professor of Agronomy.

GILBERT AMOS YOUNG, M. E., Assistant Professor of Mechanical Engineering.

Instructors.

WILLIAM HUNT BATES, A. M., Instructor in Mathematics.

GUY GALLIARD BECKNELL, M. S., Instructor in Physics.

PAUL BRUCE BRENEMAN, B. S., C. E., Instructor in Civil Engineering.

GEORGE WILKINSON CASE, B. S., Instructor in Civil Engineering.

ARTHUR WILLIAMS COLE, B. S., Instructor in Mechanical Engineering.

SAMUEL DICKEN CONNER, B. S., Instructor in Agricultural Chemistry.

CLYDE BARNES COOPER, A. M., Instructor in English.

EDWARD HATTON DAVIS, S. B., Instructor in Economics and History.

EDWARD ELIAS, A. B., Instructor in German.

HOWARD EDWIN ENDERS, M. S., Ph. D., Instructor in Zoology.

LOUIS EUGENE ENDSLEY, M. E., Instructor in Locomotive Laboratory.

¹JOHN TEVIS GUNN, A. M., Instructor in German.

WILLIAM TEMPLE HECK, B. S., Instructor in Engineering Laboratory.

JOHN HEISS, A. M., Instructor in German.

OSCAR COLMAN KLIPSCH, B. S., Instructor in Mechanical Engineering.

ALFRED OUGHTON LEE, M. D., Instructor in German.

GEORGE HEYSER LIGHT, A. M., Instructor in Mathematics.

FRANK STOCKTON MAGILL, A. B., Instructor in English.

²EDWARD MAHIN, M. S., Instructor in Chemistry.

WILLIAM RAY MANNING, Ph. D., Instructor in History.

ARTHUR RENWICK MIDDLETON, A. B., Ph. D., Instructor in Chemistry.

CHARLES CLEMENTS MORRIS, A. M., Instructor in Mathematics.

WILLIAM McEWEN NYE, B. S., Instructor in Farm Mechanics.

¹From November 1.

²Absent on leave.

NELLIE PHILLIPS SAMSON, Instructor in Wood Carving.
 HERBERT HENRY SCOFIELD, M. E., Instructor in Materials Testing Laboratory.
 CAROLYN ERNESTINE SHOEMAKER, M. S., Instructor in English.
 WILLIAM TELFORD SMALL, B. S., Instructor in Electrical Engineering.
 ARTHUR BESSEY SMITH, B. S., Instructor in Telephone Engineering.
 *BURKE SMITH, Ph. D., Instructor in Analytical Mechanics.
 WILLIAM WESLEY SMITH, B. S. A., Instructor in Animal Husbandry.
 OLIVER PERKINS TERRY, M. S., M. D., Instructor in Physiology.
 †LOUIS AGASSIZ TEST, B. M. E., A. C., Instructor in Chemistry.
 RALPH BROWN TRUEBLOOD, B. S., Instructor in Practical Mechanics.
 CICERO BAILEY VEAL, B. S., Instructor in Machine Design.
 LUTHER CORNELIUS WEEKS, B. S., Ph. B., Instructor in Mathematics.
 HENRY ADELBERT WHITE, A. M., Instructor in English.
 ARCHER EVERETT YOUNG, A. B., Ph. D., Instructor in Mathematics.
 WILLIAM ARTHUR ZEHRING, A. M., Instructor in Mathematics.

Assistants.

MAYNARD EDWARD ALLEN, B. S., Assistant in Civil Engineering.
 CHARLES TREAT BRAGG, B. S., Assistant in Chemistry.
 VERNON THEODORE BRIGHAM, B. S. E. E., Assistant in Electrical Engineering.
 ROBERT GARFIELD BROWN, B. S., Assistant in Practical Mechanics.
 SIMPSON LEROY BROWN, A. B., Assistant in Physics.
 CLIFFORD DOWNS BUSHNELL, B. S., Assistant in Practical Mechanics.
 DAVID WILLIAM CORNELIUS, A. B., Assistant in Physics.
 EDWARD HARVEY DEXTER, B. S., Assistant in Practical Mechanics.
 HAROLD SHIELDS DICKERSON, B. S. E. E., Assistant in Engineering Laboratory.
 THOMAS TAYLOR EYRE, B. S., Assistant in Machine Design.
 LAWRENCE BRADLEY FIELDS, B. S., Assistant in Practical Mechanics.
 HELEN GOLDEN, M. S., Assistant in Practical Mechanics.
 FRED WARREN GORDON, Ph. C., B. S., Assistant in Pharmacy.
 ‡HARLAND DAVIDSON HOLMAN, B. S., Assistant in Practical Mechanics.
 JOHN DEMOSS JARVIS, B. S. A., Assistant in Dairying.
 CLAUDE SYLVESTER JOHNSON, B. S., Assistant in Machine Design.
 JACOB GARRETT KEMP, B. S., Assistant in Physics.
 ROBERT DAVIS KNEALE, B. S., Assistant in Civil Engineering.
 GEORGE WILLIAM LAMKE, B. S., Assistant in Electrical Engineering.

*From October 8.

†Absent on leave.

‡Resigned December 1.

CLARENCE EDWARD LONG, Student-Assistant in Civil Engineering.
 HERBERT BOUTON McDERMID, Assistant in Practical Mechanics.
 ERNEST CHRISTIAN McKELVY, A. B., Assistant in Chemistry.
 BLANCHE ANNIS MILLER, Assistant in Library.
 GEORGE WESLEY MUNRO, E. E., Assistant in Engineering Laboratory.
 RALPH WALDO NOLAND, Assistant in Practical Mechanics.
 KAROLYN MARGARET NORTON, Assistant in Library.
 WILLIAM ARTHUR O'BRIEN, Student-Assistant in Civil Engineering.
 BERTHA G. RIDGWAY, Assistant in Library.
⁹WILLIAM ARTHUR RUSH, B. S., Assistant in Electrical Engineering.
 CLIFTON ERVIN SCHULT, B. S., Assistant in Electrical Engineering.
 JOHN EMIL ULRICH, B. S., Assistant in Machine Design.
 LAWRENCE WILKERSON WALLACE, B. S., Assistant in Mechanical Engineering.
 LEONARD ERNEST YOUNG, M. S., Assistant in Chemistry.

Shop Assistants.

BROOKS BUCKLEY ELLIS, Assistant in Foundry.
 ROYAL BERTRAM GREGG, Assistant in Wood Shop.
 CHARLES ANDREW HAAG, Assistant in Machine Shop.
 FOSTER FURMAN HILLIX, Assistant in Machine Shop.
 JOHN FRANCIS KELLER, Assistant in Forge Room.
¹⁰JESSE DAY TRUEBLOOD, Assistant in Wood Room.
 MORTON, TUMEY,* Assistant in Foundry.
 JOHN ADAM VAN COURT, Assistant in Wood Shop.

HUGH NICOL, Physical Director.
 EVA LENORE LINN, M. S., Organist.
 ARTHUR DUFFY, B. S., Superintendent of Buildings.
 PIERRE VAN LANDEGHEN, Superintendent of Grounds.

SPECIAL LECTURERS.

In Engineering.

M. K. BARNUM, Second Vice-President C., B. & Q R. R., Chicago.—Engine Failures.
 GEORGE M. BASFORD, American Locomotive Company.—The Motive Power Officer.
 L. P. BRECKENRIDGE, Director Engineering Experiment Station, University of Illinois.—The Use of Bituminous Coal in Boiler Furnaces.

⁹Resigned February 11.

¹⁰From December 11.

- T. G. CONDRON, Civil Engineer, Chicago.—Reinforced Concrete.
- S. B. FOWLER, Chief Engineer Sterling Company, LaFayette.—The Sterling System.
- ELWOOD HAYNES, President Haynes Automobile Co., Kokomo.—Recent Developments in Automobile Design.
- G. H. KELSEY, Superintendent Union Traction Co.—Maintenance of Equipment.
- SAMUEL G. McMEEN, Consulting Engineer, Chicago.—Some Phases of Telephone Engineering.
- E. NEWTON WELLS, Mgr. Cen. Union Telephone Co., LaFayette.—Telephone Construction.
- GEORGE D. PHILLIPS, Engineer LaFayette Telephone Co.—Telephone Construction.
- H. E. VANDERLIP, Civil Engineer, Chicago.—Some Practical Problems Concerning Building Construction.
- JAMES M. WHITE, Dean of Schools of Engineering, University of Illinois.—Estimating Cost of Buildings.

In Agriculture.

- E. DAVENPORT, Dean of College of Agriculture, University of Illinois.—Better Schools for Country People.
- ADDISON C. HARRIS, Indianapolis.—The Promotion of Agriculture.
- H. A. HUSTON, A. M., A. C., German Kali Works, Chicago.—Manures and Fertilizers.
- BERTHA M. MILLER, Franklin, Indiana.—Principles of Breadmaking, etc.
- W. J. SPILLMAN, Dept. of Agriculture, Washington.—Types of Farming and Their Possibilities.
- GEORGE SPITZER, Ph. G., LaFayette.—Poultry and Bee-keeping.

In Pharmacy.

- THOMAS BURK, Traveling Salesman with Mooney-Mueller Drug Co., Indianapolis.
- AUGUST J. DETZER, Traveling Salesman with Mooney-Mueller Drug Co., Indianapolis.
- CHARLES DOWNING, Traveling Salesman with A. Kiefer & Co., Indianapolis.
- J. K. LILLY, President Eli Lilly Co., Indianapolis.
- MARTIN A. QUINN, LaFayette.—Pharmaceutical Jurisprudence.
- LOUIS H. SCHULMEYER, Chemist with Daniel Stewart, Indianapolis.
- A. L. WALTERS, Botanist with Eli Lilly Co., Indianapolis.
- JOHN S. WRIGHT, Botanist with Eli Lilly Co., Indianapolis.

STAFF OF THE AGRICULTURAL EXPERIMENT STATION.

ARTHUR GOSS, M. S., A. C., Director; State Chemist.
 JOSEPH CHARLES ARTHUR, D. Sc., Botanist.
 ROBERT ALEXANDER CRAIG, D. V. M., Veterinarian.
 OTO FRED HUNZIKER, M. S. A., Dairy Husbandry.
 JOHN HARRISON SKINNER, B. S., Animal Husbandry.
 JAMES TROOP, M. S., Horticulturist and Entomologist.
 ALFRED THEODOR WIANCKO, B. S. A., Agriculturist.
 WILLIAM JAMES JONES, Jr., M. S., A. C., Associate Chemist.
 GEORGE IRVING CHRISTIE, B. S. A., Assistant in Crop Improvement.
 WILBUR ANDREW COCHEL, B. S., Assistant in Animal Husbandry.
 SAMUEL DICKEN CONNER, B. S., Assistant in Soil Improvement.
 CLINTON OTOS CROMER, B. S., Assistant Agriculturist.
 HOMER JOHNSON FIDLER, Assistant in Dairy Husbandry.
 MARTIN LUTHER FISHER, B. S., Assistant Agriculturist.
 LAWRENCE SHERMAN HASSELMAN, B. S., Assistant in Agricultural Chemistry.
 OWEN CLIVE HAWORTH, B. S., Assistant Chemist.
 FRANK DUNN KERN, B. S., Assistant Botanist.
 WALTER PEARSON KELLY, B. S., Assistant Chemist.
¹¹MADISON PORCH, B. S., Assistant Chemist.
¹²ROLAND ELISHA STONE, Assistant in Botany.
¹³HERMAN DANIEL WENDT, Dairy Field Assistant.
 CHARLES GOODRICH WOODBURY, B. S., Assistant in Horticulture.

INDIANA MEDICAL COLLEGE.

(In affiliation with Purdue University. Located at Indianapolis.)

Officers of Administration.

HENRY JAMESON, M. D., Dean. JOHN H. OLIVER, M. D., Treasurer.
 ALOIS B. GRAHAM, M. D., Secretary.

Faculty.

WM. B. FLETCHER, M. D., Emeritus Professor of Neurology and Psychiatry.
 WILLIAM FLYNN, A. M., M. D., Emeritus Professor of Medicine.
 JAMES LIVINGSTONE THOMPSON, M. D., LL.D., Emeritus Professor of Ophthalmology.
 WILLIAM M. WRIGHT, M. D., Emeritus Professor of Surgery.
 G. W. H. KEMPER, M. D., Emeritus Professor of History of Medicine.

¹¹Resigned February 17.

¹²From January.

¹³Resigned May.

- CHRISTIAN B. STEMEN, A. M., M. D., LL. D., Emeritus Professor of Surgery.
- A. W. BRAYTON, A. M., M. D., Professor of Dermatology, Syphilology and Clinical Medicine.
- WALTER S. BARNETT, A. M., M. D., Professor of Anatomy.
- LOUIS BURCKHARDT, M. D., Professor of Physiology and Clinical Obstetrics.
- ALBERT E. BULSON, Jr., B. S., M. D., Professor of Clinical Ophthalmology.
- GEORGE J. COOK, M. D., Professor of Gastro-intestinal and Rectal Surgery.
- EDMUND D. CLARK, M. D., Professor of Surgery and Clinical Surgery.
- LEWIS C. CLINE, M. D., Professor of Laryngology, Rhinology, and Otology.
- FREDERICK R. CHARLTON, M. D., Professor of Clinical and Genito-urinary Surgery.
- L. PARK DRAYER, A. B., M. D., Professor of Pediatrics.
- JOSEPH RILUS EASTMAN, B. S., M. D., Professor of Surgery and Clinical Surgery.
- THOMAS B. EASTMAN, A. B., M. D., Professor of Clinical Gynecology.
- CHARLES E. FERGUSON, M. D., Professor of Bacteriology and Clinical Gynecology.
- ALOIS B. GRAHAM, A. M., M. D., Professor of Gastro-intestinal Diseases.
- WILLIAM O. GROSS, A. M., M. D., Ph. G., Professor of Toxicology.
- FREDERICK C. HEATH, M. D., Professor of Clinical Ophthalmology.
- EDWARD F. HODGES, A. M., M. D., Professor of Obstetrics.
- FRANKLIN W. HAYS, M. D., Professor of Dermatology and Clinical Medicine.
- JOHN N. HURTY, Phar. D., M. D., Professor of Hygiene and State Medicine.
- HENRY JAMESON, B. S., M. D., LL. D., Professor of Medicine.
- GEORGE D. KAHLO, M. D., Professor of Medicine and Clinical Medicine.
- ALBERT C. KIMBERLIN, M. D., Professor of Clinical Medicine.
- JOHN J. KYLE, M. D., Professor of Clinical Laryngology, Rhinology, and Otology.
- JOHN L. MASTERS, M. D., Professor of Clinical Laryngology, Rhinology and Otology.
- FRANK A. MORRISON, A. M., M. D., Professor of Ophthalmology.
- GEORGE W. McCASKEY, A. M., M. D., Professor of Medicine and Clinical Medicine.
- CHARLES F. NEU, M. D., Professor of Neuro-pathology and Clinical Psychiatry.
- THOMAS B. NOBLE, A. B., M. D., Professor of Clinical Gynecology.
- JOHN H. OLIVER, M. D., Professor of Surgery.

- THEODORE POTTER, A. M., M. D., Professor of Principles of Medicine and Clinical Medicine.
- ORANGE G. PFAFF, M. D., Professor of Gynecology.
- MILES F. PORTER, A. M., M. D., Professor of Surgery and Clinical Surgery.
- LAFAYETTE PAGE, A. M., M. D., Professor of Clinical Laryngology, Rhinology, and Otology.
- HUGO O. PANTZER, M. D., Professor Clinical Gynecology.
- GUSTAV A. PETERSDORF, Phar. D., M. D., Professor of Inorganic Chemistry; Director of Chemical Laboratory.
- ERNEST C. REYER, M. D., Professor of Neurology and Psychiatry.
- ROSCOE H. RITTER, Ph. B., M. D., Professor of Pathology and Clinical Medicine.
- C. RICHARD SCHAEFFER, M. D., Professor of Materia Medica and Therapeutics and Clinical Medicine.
- ALBERT E. STERNE, A. M., M. D., Professor of Clinical Neurology and Psychiatry.
- JOHN W. SLUSS, A. M., M. D., Professor of Anatomy and Clinical Surgery.
- JAMES H. TAYLOR, A. M., M. D., Professor of Pediatrics.
- BUDD VAN SWERINGEN, M. D., Professor of Physical Diagnosis.
- WILLIAM N. WISHARD, A. M., M. D., Professor of Genito-urinary Surgery.
- FRANK B. WYNN, A. M., M. D., Professor of Physical Diagnosis and Clinical Medicine.
- WILLIAM CHARLES WHITE, M. B., M. D., Professor of Neuro-pathology and Clinical Psychiatry.
- C. S. WOODS, M. D., Professor of Organic and Physiologic Chemistry.
- KENT K. WHELOCK, A. M., M. D., Professor of Clinical Laryngology, Rhinology and Otology.

Lecturers, Demonstrators, and Assistants.

- NELSON D. BRAYTON, M. D., Lecturer on Dermatology and Syphilology.
- EDWARD A. BROWN, M. D., Lecturer on Surgical Dressings; Assistant in Surgery.
- JOHN Q. BYRAM, D. D. S., Lecturer on Dental Surgery.
- W. C. BUNTIN, M. D., Demonstrator of Pathology and Clinical Medicine.
- WILLIAM F. CLEVINGER, M. D., Clinical Lecturer on Rhinology, Laryngology, and Otology.
- ALBERT M. COLE, M. D., Lecturer on Electrotherapeutics and Radiology.
- CHARLES E. COTTINGHAM, M. D., Demonstrator of Anatomy and Clinical Medicine; Assistant in Diseases of Mind and Nervous System.
- J. M. CUNNINGHAM, M. D., Demonstrator of Anatomy and Clinical Medicine.
- WILLIAM T. S. DODDS, M. D., Lecturer on Clinical Pathology and Medicine; Director of Clinical Laboratory.

- FRANCIS O. DORSEY, M. D., Lecturer on Pathology and Clinical Medicine.
- JOHN Q. DAVIS, M. D., Demonstrator of Anatomy; Clinical Lecturer on Gynecology.
- BERNARD ERDMAN, M. D., Demonstrator of Histology and Genito-urinary Surgery.
- DAVID WAYNE FOSLER, M. D., Assistant in Materia Medica and Therapeutics.
- BERNA C. FRY, M. D., Demonstrator of Anatomy.
- WILLIAM P. GARSHWILER, M. D., Clinical Lecturer on Genito-urinary Surgery.
- JOHN H. GERTLER, Ph. G., Ph. C., Lecturer on Pharmacy.
- J. D. GARRET, M. D., Demonstrator of Histology.
- H. C. GEMMIELL, M. D., Demonstrator of Histology.
- GEORGE R. GREEN, M. D., Lecturer on the History of Medicine.
- FLETCHER HODGES, M. D., Lecturer on Obstetrics.
- WALTER D. HOSKINS, M. D., Lecturer on Pediatrics.
- HENRY A. HUTCHESON, M. D., Lecturer on Surgical Dressings.
- G. A. HAMER, M. D., Lecturer on Genito-urinary Surgery.
- WILLIAM F. HUGHES, M. D., Lecturer on Materia Medica and Clinical Ophthalmology.
- S. A. JOHNSTON, M. D., Demonstrator of Bacteriology, and Clinical Laryngology, Rhinology, and Otology.
- NORMAN E. JOBES, M. D., Lecturer on Osteology and Clinical Surgery.
- BERNAYS KENNEDY, M. D., Lecturer on Medicine and Clinical Gynecology.
- T. VICTOR KEENE, M. D., Demonstrator of Bacteriology and Clinical Pathology.
- EDWIN S. KNOX, M. D., Demonstrator of Anatomy.
- W. B. KITCHEN, M. D., Assistant in Physiology.
- EDGAR F. KISER, M. D., Lecturer on Embryology.
- DANIEL W. LAYMAN, M. D., Demonstrator of Pathology, and Clinical Laryngology, Rhinology and Otology.
- C. S. LITTLE, A. M., M. D., Lecturer on Pathology and Clinical Medicine.
- HARRY K. LANGDON, M. D., Lecturer on and Demonstrator of Bacteriology.
- PAUL F. MARTIN, M. D., Assistant in Surgical Pathology.
- JOHN E. MORRIS, M. D., Director in Anatomical Laboratory.
- JOHN R. NEWCOMB, M. D., Demonstrator in Histology, and Prosector in Anatomy.
- JOHN A. PFAFF, M. D., Lecturer on Gynecology and Physical Diagnosis.
- EVERETT E. PADGETT, M. D., Clinical Lecturer on Obstetrics.
- DAVID ROSS, M. D., Lecturer on Minor Surgery; Demonstrator of Operative Surgery.

WILLIAM B. ROBINSON, M. D., Director in Histological Laboratory;
Lecturer on Clinical Medicine.

J. V. REED, M. D., Director in Neuro-anatomical Laboratory.

FRANK E. SOMMER, M. D., Lecturer on Anatomy.

MOSES THORNER, M. D., Demonstrator of Pathology and Clinical Gynecology.

HAROLD TAYLOR, LL. B., Lecturer on Medical Jurisprudence.

O. N. TORIAN, A. B., M. D., Lecturer on Pediatrics.

H. S. THURSTON, M. D., Demonstrator of Pathology.

HERBERT N. WOOLLEN, M. D., Demonstrator of Bacteriology.

HELEN E. KNABE, M. D., Demonstrator of Clinical Laboratory Methods.

FRANK E. ABBETT, M. D., Demonstrator of Clinical Pathology.

H. E. FIGG, M. D., Demonstrator of Clinical Pathology.

MAUD McCONNELL, M. D., Demonstrator of Clinical Pathology.

FRANK L. TRUITT, M. D., Demonstrator of Clinical Pathology.

Special Lecturers.

CHARLES S. BOND, M. D., Lecturer on Medical Photo-micrography.

GEORGE KNAPP, M. D., Lecturer on Ophthalmology.

CLARENCE PROVINCE, M. D., Lecturer on Psychiatry.

GEORGE H. GRANT, M. D., Lecturer on Surgery.

HISTORY AND DESCRIPTION OF THE INSTITUTION.

Purdue University originated in the Act of Congress approved July 2, 1862, appropriating public lands to the various states for the purpose of aiding in the maintenance of colleges for instruction in science and technology.

The State of Indiana accepted the provisions of the Act of Congress by an Act of Legislature approved March 6, 1865, thus providing for the establishment and maintenance of the institution. Notable donations have been accepted in the same faith from citizens of Tippecanoe County, John Purdue, Martin L. Pierce, Eliza Fowler and James M. Fowler; also from Amos Heavilon of Clinton County.

Subsequent acts of Congress for the further endowment of the institution have been formally accepted by the Legislature of the State, which has also fixed the name and location of the University.

From the first, the institution has been under the control of trustees appointed either by the Legislature or the Governor. These trustees are responsible for all official acts, are subject to removal, and are in the strictest sense trustees of the State's interests.

The property of the institution is held in the name of the State and can not be disposed of without legislation.

The plan and purposes of the University are to provide liberal instruction in those arts and sciences relating to the various industries and professions, and to conduct investigations and disseminate information concerning the principles and applications of agricultural science.

The scope and work of the University are fixed by law as set forth in the five acts of Congress relating to the establishment and endowment of the institution, and which have been accepted by the State of Indiana, as follows:

The Act approved in 1862, appropriating lands, states that:

"The leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

The Act approved in 1887 appropriates \$15,000 annually for the Experiment Station, and states that:

"In order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established, etc."

The Act of 1890 appropriates \$25,000 annually for maintenance, with the provision that it

"Be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their application to the industries of life, and to facilities for such instruction."

The Act of 1906 provides for an increased appropriation

"For the more complete endowment and maintenance of agricultural experiment stations, established, or which may hereafter be established, under the act of Congress approved March second, eighteen hundred and eighty-seven."

The Act of 1907 provides further for an increased appropriation

"For the more complete endowment and maintenance of agricultural colleges now established, or which may hereafter be established, in accordance with the Act of Congress approved July 2, 1862, and the Act of Congress approved August 20, 1890, the sum of \$5,000, in addition to the sums named in said act, for the fiscal year ending June 30, 1908, and an annual increase of the amount of such appropriation thereafter for four years by an additional sum of \$5,000 over the preceding year."

In accordance with the provisions of its foundation, the University offers the following courses of instruction:

1. In Agriculture—

Science and practice of agriculture; horticulture; entomology; agricultural chemistry; veterinary science; dairying; animal husbandry.

2. In Applied Science—

Biology; chemistry; physics; industrial art; sanitary science; household economics.

3. In Mechanical Engineering—

Shop practice; machine design; transmission of power; hydraulic engineering; steam engineering.

4. In Civil Engineering—

Shop practice; railway engineering; bridge engineering; hydraulic engineering; sanitary science.

5. In Electrical Engineering—

Shop practice; machine design; electrical engineering; dynamo construction; installation and management of electric railways and lighting plants; telephone engineering.

6. In Pharmacy—

Pharmacy; chemistry; materia medica; prescription practice; botany.

7. In Medicine—

A four years' course.

Instruction was begun at Purdue in 1874. The first class was graduated in 1875, since which time the instructional work of the institution has been continuous.

Approximately three thousand students have graduated from the institution, and over ten thousand have received instruction for a longer or shorter period. The records of its graduates show that, to an unusual extent, they have taken a prominent part in the active industries of life, and are practically contributing to the development and progress of every form of industry.

Tuition is free to residents of Indiana. Nonresidents pay an annual tuition fee of \$25. All students pay certain fixed fees to cover the actual cost of materials and privileges furnished.

The instructional corps of the institution numbers two hundred and forty-two; one hundred and thirty-three in the college departments at LaFayette, and one hundred and nine in the medical faculty.

The University has property to the value of \$1,153,000, as follows:

Grounds	\$110,000
Buildings	750,000
Furniture and fixtures.....	30,000
Apparatus and machinery.....	225,000
Library	28,000
Live stock	10,000

In addition to its primary function as an educational institution, the University is charged under the laws of the State with the administration of the Farmers' Institutes; the Agricultural Experiment Station; and the inspection and regulation of the sale of Commercial Fertilizers and Feeding Stuffs. None of the funds appropriated for or belonging to these departments can be used in any way for the support of the departments of instruction.

Purdue University has come to be ranked with the best schools of technology. Of this its rapid growth in attendance from all

parts of the country, and the remarkable interest in its work shown by practical business men, are most conclusive proof. Its graduates are sought for in every department of industrial activity and maintain themselves with credit. It is not too much to say that thousands of young men have found at Purdue the opportunity for training which has opened up careers of profit to themselves and of the highest usefulness to the community.

It is the policy of the University—

First. To foster close relations with the commercial world, to the end that our instructors may be in touch with the latest progress in the industries and professions, in order to make the technical instruction of the greatest possible value.

Second. To keep the opportunities of the University within reach of the great numbers of young men and young women of limited means to whom such training is of highest value.

Both faculty and officers are thus earnestly striving to maintain the institution in conformity to the high and useful purposes of its founders.

ATTENDANCE FOR THE YEAR 1906-1907.

SUMMARY OF STUDENTS.

Graduates	51
Seniors	241
Juniors	319
Sophomores	427
Freshmen	531
Specials	36
School of Pharmacy.....	108
School of Medicine	226
Winter Course in Agriculture.....	107

Total 2,046

The following table will show the growth of the institution in respect to attendance since its organization; the respective figures being for the academic year ending June 30, of the years named:

YEAR.	DEGREES GRANTED.					STUDENTS.										
	Bachelors.	Advanced.	Pharmacy.	Medicine.	Total.	Post-Graduates.	Seniors.	Juniors.	Sophomores.	Freshmen.	Elective and Special.	School of Pharmacy.	School of Medicine.	Winter School of Agriculture.	Total.	Preparatory Department.
1875.....	1	.....	.....	.....	1	.....	1	.....	3	9	2	.....	.....	.....	15	49
1876.....	1	.....	.....	.....	2	.....	1	1	6	8	1	.....	.....	.....	17	49
1877.....	2	.....	.....	.....	2	1	2	6	6	23	22	.....	.....	.....	60	79
1878.....	4	3	.....	.....	7	3	4	5	12	28	13	.....	.....	.....	65	101
1879.....	2	1	.....	.....	3	1	2	14	15	34	10	.....	.....	.....	76	119
1880.....	7	.....	.....	.....	7	2	7	11	22	36	8	.....	.....	.....	86	117
1881.....	8	.....	.....	.....	8	2	8	13	30	39	21	.....	.....	.....	113	141
1882.....	8	2	.....	.....	10	3	11	20	18	47	12	.....	.....	.....	111	127
1883.....	15	1	.....	.....	16	3	15	10	20	37	18	.....	.....	.....	106	113
1884.....	10	.....	.....	.....	10	4	12	14	20	42	20	.....	.....	.....	112	101
1885.....	10	1	.....	.....	11	2	13	16	16	67	7	7	.....	.....	128	132
1886.....	16	1	7	.....	24	3	16	10	27	76	14	13	.....	.....	159	156
1887.....	8	1	5	.....	14	11	8	34	49	91	18	19	.....	.....	230	162
1888.....	24	2	4	.....	30	26	26	31	42	78	24	28	.....	14	269	99
1889.....	26	7	6	.....	39	34	29	32	52	92	46	28	.....	15	328	111
1890.....	29	8	16	.....	53	34	29	38	66	105	23	48	.....	5	348	115
1891.....	34	6	22	.....	62	32	35	51	67	151	17	66	.....	.....	419	111
1892.....	41	12	21	.....	74	37	45	56	104	200	24	70	.....	13	549	94
1893.....	44	17	22	.....	83	27	46	87	138	151	18	87	.....	28	582	85
1894.....	70	14	36	.....	120	25	73	104	119	166	25	85	.....	29	626	56
1895.....	77	15	35	.....	127	36	78	99	125	135	37	90	.....	33	633	.....
1896.....	81	11	25	.....	117	37	81	94	114	174	17	75	.....	43	635	.....
1897.....	74	22	33	.....	129	50	73	95	150	136	42	88	.....	30	664	.....
1898.....	73	25	36	.....	134	57	73	133	124	171	62	95	.....	35	750	.....
1899.....	102	23	33	.....	158	62	103	84	148	180	72	60	.....	40	749	.....
1900.....	72	10	21	.....	103	52	71	127	160	241	31	75	.....	92	849	.....
1901.....	102	13	35	.....	150	42	106	133	233	335	29	91	.....	80	1049	.....
1902.....	119	18	39	.....	176	51	115	182	304	345	95	92	.....	85	1169	.....
1903.....	147	7	38	.....	192	54	148	251	326	384	23	81	.....	72	1339	.....
1904.....	183	13	34	.....	230	32	199	250	337	430	24	86	.....	82	1440	.....
1905.....	201	8	26	.....	235	28	203	261	389	467	24	77	.....	85	1534	.....
1906.....	215	12	34	122	383	31	221	312	409	478	36	101	339	102	2029	.....
1907.....	246	23	46	70	385	51	241	319	427	531	36	108	226	107	2046	.....

THE YEAR'S WORK.

It is gratifying to be able to report that in spite of conditions which have placed instructors and students in some departments at a great disadvantage, the work of the University as a whole has gone forward with general satisfaction, and has made substantial progress. There has been no diminution in the devotion and loyalty of students and faculty, and no lack of the spirit of industry and high endeavor which have become characteristic of Purdue.

This is the more notable because the working conditions of the University have become exceedingly unfavorable owing to the constant increase in attendance and the lack of room to accommodate students in the larger departments of instruction.

The needs of the University in this particular were set forth in the last annual report, in the form of indisputable facts, and were presented to the General Assembly in formal reports and in committee hearings, but no relief was granted. The recommendations of the trustees and the appeals of the officers of and professors of the departments of engineering and practical mechanics, to provide sufficient room and equipment for the students actually enrolled, without reference to future increase, were entirely ignored. No appropriation was made to meet the needs of the University at a time when these needs had reached a critical stage and the working conditions of the institution were most trying. The fact that under these circumstances faculty and students have continued to perform their duties with undiminished ardor emphasizes the truth that the work of Purdue in the past has been successful not because of material resources but because of the service of devoted men.

How long it will be possible to continue in this way can not be predicted. Many of the faculty are men of national reputation and have served Purdue and the State for many years. They have not sought personal gain in this service, but only the welfare of the institution. To deny recognition and support to their work is, therefore; more than a personal disappointment to them. It is too much to expect that an organization of efficient teachers can be maintained under these conditions or that in these days of keen educational competition Purdue University, which has earned for itself and the State a high reputation, can maintain its posi-

tion without reasonable support. The university authorities having done all in their power must be governed, eventually, by the will of the people as expressed through the Legislature, and here the responsibility must finally rest.

Attendance.—The attendance for the year has again shown a marked increase, reaching an enrollment, exclusive of students in the School of Medicine, of 1820. In 1900 the enrollment was 749. During these years the University has used no paid advertisements, has steadily raised its entrance requirements, and has increased its charges. Ninety-five per cent of the enrollment is in the regular prescribed courses of study, special students being discouraged. One thousand three hundred and forty students were from Indiana, every county being represented. The remaining 480 students came from fifty-four other states, territories, and foreign countries. These statistics show that Purdue is a representative institution, not only of the state but of the country at large. Its widespread reputation for thorough, practical training is responsible for its ever increasing attendance.

Statistics have been collected during the past three years relative to the occupations of the fathers of entering students. Of the 1,240 that have given such information, 31 per cent are sons of manufacturers, merchants, or business men; 29 per cent are sons of farmers; 28 per cent are sons of employes of various grades, and 12 per cent are sons of professional men. Thus 88 per cent of these students come from the industrial classes and it would appear that the University is meeting the obligations imposed by the act of Congress which specifies that its duty shall be "to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

Entrance Requirements.—The requirements for admission to the freshman class have been increased by the addition of solid geometry, to apply in September, 1907. This subject is now generally administered in the commissioned high schools of the State, and its requirement for college entrance is in conformity with general practice.

For a number of years the University has declined to receive students on certificate unless they were graduates of commissioned high schools. This requirement is designed to encourage high school pupils to complete their course through graduation before undertaking college work, it being quite evident that the discipline and training derived from a thorough, systematic high school course is fundamental to successful college work. The effect of this

requirement is shown in the increasing percentage of high school graduates who enter Purdue. The freshman class this year numbered 531, and of these 470, or 88 per cent, were graduates of Indiana commissioned high schools, or schools of equal standing elsewhere.

New Courses of Instruction.—The faculty has approved the announcement in the current catalogue of two new courses of instruction, viz.: in Forestry and in Chemical Engineering. There has been a growing interest in the scientific management of forest lands, and courses relating to this subject have been offered to our students for some years. These have now been grouped into a series of electives open to second, third and fourth year students in the schools of Science and Agriculture. They comprise lectures and laboratory practice in forest botany, forest zoology, silviculture, forest mensuration, forest management, protection, utilization, etc. The purpose of the course is not to train men for employment as professional foresters so much as to furnish important scientific knowledge to those who have the care and management of forest lands.

In chemical engineering a full four years' course is offered, designed to prepare men for service in those industries involving the principles both of engineering and chemistry. The importance of such training is shown constantly in the demands made upon managers and owners of manufacturing industries. The course now offered embraces thorough training in the principles and applications of chemical science; in drawing, shop practice, mechanics, electricity, as well as the general subjects of English, mathematics, history, German, etc.

Both of these new courses will be administered beginning with the academic year 1907-08.

Teacher's Training Course.—In response to a formal resolution of the County Superintendents' Association, adopted in July, 1906, and acting upon the advice of a special committee of the Association, appointed at the December meeting, the faculty of Purdue University announced on March 14 that it would offer a Training Course for teachers of Rural Science from April 22 to June 1. The interest in this proposal proved so slight that it was not carried out.

Popular Instruction.—Beside the formal instruction given to University classes, the institution has conducted during the year certain other activities which have been within the reach of every citizen of the State.

The Farmers' Institutes held in every county have given instruction in subjects pertaining to rural life and industries to nearly 50,000 people.

Corn Trains have been run during the year over the lines of the Lake Erie & Western, Cincinnati, Hamilton & Dayton, and the Pennsylvania Railways. The trips occupied in all twenty-two days and covered twenty-six hundred and fifteen miles. Sixty-one counties in the corn belt were visited, three hundred and forty-seven lectures and demonstrations given, and, at a low estimate, these were attended by forty-five thousand listeners.

The Corn School conducted at the University in January was attended by eleven hundred farmers and their wives, who received for one week serious and valuable instruction in that industry.

Through these various agencies the University, during the past year, has given definite instruction of a helpful character to fully one hundred thousand people.

Military Instruction.—Instruction in military science and tactics to members of the two lower classes, as required by the act of Congress establishing the University, meets with increasing difficulties owing to the larger number of students involved. During the past year the corps has enrolled over eight hundred men. Equipment for practice in drill is provided by the United States and a regular army officer is detailed to administer instruction. The organization is that of a full regiment, the officers of which, with the exception of the commandant, are all students of the University. The difficulty of maintaining an organization, or of giving instruction of high military efficiency under these conditions, is at once apparent. Add to this the lack of a suitable parade ground in summer and entirely inadequate armory facilities for winter drill, and it is evident that the department labors against great obstacles. The faculty is convinced of the value of the training and discipline, both physical and mental, conveyed in this form of instruction, and there is no doubt that better facilities as regards teaching staff, an armory, and a drill ground should be provided as rapidly as the resources of the University will permit.

Degrees Granted.—Three hundred and eighty-five degrees were granted by the faculty, as follows:

Baccalaureate Degrees—

Bachelor of Science	17
Bachelor of Science in Agriculture	8
Bachelor of Science in Mechanical Engineering	86
Bachelor of Science in Civil Engineering	59
Bachelor of Science in Electrical Engineering	76

Graduate Degrees—	
Master of Science.....	4
Mechanical Engineer	5
Civil Engineer	6
Electrical Engineer	8
Graduates of School of Medicine—	
Doctor of Medicine.....	70
Graduates of School of Pharmacy—	
Graduates in Pharmacy.....	46

Sixty-one certificates were granted also to students who had completed courses in the Winter School of Agriculture, seven certificates of proficiency to members of the senior class completing the course in military science and tactics; this course covering the entire four years of their connection with that department.

No better evidence as to the character of the work performed by candidates for these degrees can be given than to submit a list of the titles of the theses prepared by students in the schools of Science, Agriculture and Engineering as a condition of graduation. These in all cases represent a piece of individual study, research, or investigation, the key to which was given in a problem assigned by the department in which the work was performed. It will be noted that the subjects studied cover a wide range of topics, many of which are of great importance to the public welfare. It is an inevitable inference that men and women trained in so many diverse lines can hardly fail to render intelligent and helpful service in the progress of the communities in which they live.

Titles of Theses of the Class of 1907.

The Effect of Literature upon the Civil War.
 Materials for a History of Tippecanoe County, Indiana.
 Ouiatanon and the Indians.
 The Battle of Tippecanoe.
 Early history of the Townships.
 Early history of LaFayette.
 Transportation: Wabash and Erie Canals and the Railroads.
 Jane Austen's People.
 The Great English Allegories.
 Shakespeare's English Historical Plays.
 Some Letterwriters.
 The Synthetic Vegetable Alkaloids.
 The Reptiles and Amphibians of Tippecanoe County.
 The Argon Family of Elements.
 Dust Elimination in Hospitals.
 The Manufacture of Beet Sugar.
 A Vaccine for Hog Cholera.

Composite Samples vs. Single Samples of Cream; Their Effect on the Accuracy of the Babcock Test.

Fitting Swine for Show.

An Experiment to test the value of Corn Silage as a Food for Pregnant Ewes.

Experiments of the Causes of Mottles in Butter.

Denatured Alcohol.

An Orchard Survey of Wabash Township, Tippecanoe County, Indiana.

The Estimation of Fat and Moisture in Butter; a study of the Comparative Efficiency of the Existing Methods.

Efficiency Tests of the Purdue Lighting Plant.

Tests of a Consolidated Locomotive equipped with a Waldschaert Valve Gear, and a Comparison of Results from a Similar Locomotive equipped with a Stephenson Valve Gear.

A Test of the Power Plant of the LaFayette Box Board Works.

Tests to determine the Efficiency at a Constant Output of a 250 H. P. Stirling Boiler in the Purdue Power Plant.

A 144 Hour Test on a Fairbanks-Morse Suction Producer Power Plant.

Performance of Locomotive Schenectady No. 3 at different Cutoffs under a Boiler Pressure of 160 Pounds, Speed of 30 Miles per Hour, and Full Throttle.

Effect of the Length of a Brakeshoe upon the Coefficient of Friction and a Comparison of Loss of Weight in the Shoe.

A Determination of the Efficiency under different Points of Ignition of a Meriam-Abbott Twin-cylinder Gas Engine, using Artificial Gas.

A Determination of the Efficiency under Different Jacket Temperatures of a Meriam-Abbott Twin-cylinder Gas Engine using Artificial Gas.

An Efficiency Test of a 20 H. P. DeLaval Turbine using Superheated Steam.

The design of an Absorption Dynamometer for the Vaucrain Compound Engine in the Purdue Laboratory.

The design of a Vacuum Steamheating System for a 12 Story Office Building.

A study of the Efficiency of a Rutenberg Four-cylinder, Four-cycle Automatic Engine using Gasoline.

A study of the Amount of Superheating due to Different Rates of Combustion and the Different Lengths of Superheating Pipes in Locomotive Schenectady No. 3.

A study of the Frictional Qualities of Plain Iron Brakeshoes as affected by Varying Degrees of Hardness.

Strength of Staybolts and of Staybolt Iron.

A study of the Frictional Qualities of Brakeshoes.

Tests of Westinghouse Triple Valves.

A comparative study of the use of Gasoline and Alcohol in a Fairbanks-Morse Internal Combustion Engine.

A study of the Effect of Changes in the Points of Ignition and Temperature of Jacket Water on a Fairbanks-Morse Internal Combustion Engine using Gasoline.

A study of an Emmons Two-cylinder, Two-cycle Marine Engine and Propeller using Gasoline.

- A study of the Effect of Changes in Points of Ignition and Temperature of Jacket Water on a Fairbanks-Morse Internal Combustion Engine using Alcohol.
- A study of the Efficiency of an Emmons Two-cylinder, Two-cycle Marine Engine using Gasoline.
- Efficiency Tests of a Stoddard-Dayton Gasoline Automobile.
- An Efficiency Test of a 20 H. P. DeLaval Turbine using Saturated Steam.
- Performance of Locomotive Schenectady No. 3 at Different Cutoffs under a Boiler Pressure of 180 Pounds, Speed of Forty Miles per Hour, and Full Throttle.
- A study of the Effect of Changes in Clearance and Points of Ignition upon the Performance of an Otto Gas Engine using Artificial Gas.
- An Efficiency Test of an Allis-Chalmers Corliss Engine.
- The Design of a Vacuum Steamheating System for the K. of P. Building at Indianapolis, Indiana.
- Performance of Locomotive Schenectady No. 3 at Different Speeds under a Boiler Pressure of 160 Pounds, Cutoff 28 per cent., and Full Throttle.
- A study of the Effect of Changes in Clearance and Mixture of Gas and Air upon the Performance of an Otto Gas Engine using Artificial Gas.
- Performance of Locomotive Schenectady No. 3 at Different Speeds under a Boiler Pressure of 160 Pounds, Cutoff 15 per cent., and Full Throttle.
- The Design of a Plenum System of Warm Air Heating for the new Chemistry Building at Purdue University.
- The Design of a Friction Brake for the Vaclain Compound Engine in the Engineering Laboratory at Purdue University.
- Performance of Locomotive Schenectady No. 3 at Different Cutoffs under Boiler Pressure of 160 Pounds, Speed 50 Miles per hour, and Full Throttle.
- The Production and Utilization of Heat for Power Purposes.
- Performance of Locomotive Schenectady No. 3 at Different Speeds under a Boiler Pressure of 160 Pounds, Cutoff 30 per cent., and Full Throttle.
- The design of a Centralized Steam Heating System for the City of Anderson.
- The design of a Centralized Hot Water Heating System for the City of Logansport, Indiana.
- An Efficiency Test of an Ingersoll-Rand Air Compressor under Different Delivery Pressures.
- A study of the Efficiency of a Continental Two-cylinder, Four-cycle Automobile Engine using Gasoline.
- Commercial Efficiency Tests of a 250 H. P. Stirling Boiler under Operating Conditions in the Purdue Power Plant.
- A study of the Efficiency of a Rutenberg Four-cylinder, Four-cycle Automobile Engine using Alcohol.
- Tests of a Consolidated Locomotive equipped with a Stephenson Valve Gear, and a Comparison of Results from a similar Locomotive equipped with a Waldschaert Valve Gear.
- The design of a Coal-handling Crane.
- Cement Specifications.
- Efficiency Tests of a Two-cylinder Queen Gasoline Automobile.

The design of a Vacuum Steam Heating System for a Two-story Office Building.

Location and Economic Study of Proposed Line from LaFayette to Hebron.

Comparative design of a Steel and a Reinforced Concrete Bridge.

Comparative design of a Reinforced Concrete Highway Girder and Arch.

Design of a Reinforced Concrete Arch.

Tests of Wooden Paving Blocks.

Tests to determine the Stresses in Stiffeners of Plate Girders.

Design of a Reinforced Concrete Railway Arch Bridge for Vandalia R. R.

Crossing at Big Creek, Marshall, Illinois.

Observations of Vibration in Highway Bridges.

Design of a Waterpower Development on Wild Cat Creek.

Strength of Reinforced Concrete Under Impact.

Design of Waterpower Development on Sugar Creek, Parke County, Indiana.

Design of Steel Office Building.

Study of Apparatus for Measuring Bridge Vibrations.

Design of a Single-Track Railway Swing Bridge of 288-foot Span.

Strength of Brick Masonry.

Strength of Concrete Mixed with Various Per Cents. of Clay.

Run-off from Pervious Areas.

Tests of Materials Entering into Reinforced Concrete Beams.

Tests of Reinforced Concrete.

Investigation of the Water Supply of the City of Laporte, Indiana.

Strains in Wooden Trestles.

Design of Waterpower Development on Flat Rock River at St. Paul, Indiana.

Strength of Reinforced Concrete under Repetitive Loading.

Design of Water Supply System for West LaFayette, Indiana.

Design of Steel Buildings for Bridge Shop.

Stream Gaugings of the Wabash River.

Design of Waterpower Development at Monticello, Indiana.

Study of the Cost of Concrete.

Methods of Computing Quantities for Estimates of Concrete.

Study and Erection of the Overhead Materials of an Electric Trolley Line.

An Investigation of Storage Battery Performance.

Commercial Test of the Electric Laboratory Power Plant.

Tests of the Electrical Lighting and Power Plant of the Union Block at Anderson.

Experimental and Theoretical Study of Permeameters.

Test of a Current Transformer.

Comparative Tests of Commercial Lightning Arresters.

Test of the Heat Radiation of Insulating Varnishes.

The Design, Construction and Calibration of a Flux Motor.

A Study of the Characteristics of a Mercury Vapor Converter under Various Conditions of Loading.

Design of Motor Equipment of Burt-Terry-Wilson Company.

Comparison of Theoretical Speed Time Curves with Results Derived by Actual Test.

- Brakeshoe Wear and Oil Consumption of Street Railway Cars.
 A Complete Test of a Motor-Driven Booster Set.
 Interurban Car Lighting.
 A Study of the Current and E. M. F. Relations in a Single-Phase Compensated Induction Motor.
 The Design of a Hydro-electric Plant and Transmission System.
 The Efficient Test of a Ross Differential and Bevel Drive.
 Hysteresis and Eddy Current Losses in Rotation Fields.
 Effect of the Resistance of Carbon Brushes on Commutation.
 Service Tests of an Electric Railway Car.
 Current and E. M. F. Waves in a Three-Phase Induction Motor.
 Tests of a Lincoln Variable Speed Electric Motor.
 A Study of Commutator Motors when Operated with Alternating Current.
 Tests of a Line of Direct and Alternating Current Machines.
 Tests of Insulating Materials.
 A Study of Troubles in the Strowger Common Battery Automatic Telephone System.
 Laboratory Tests of the Contact Resistance Between Trolley Wheel and Wire.
 Investigation of the High Pressure and Low Pressure Line Losses of a New Interurban Railway.
 An Electrolytic Survey of the City of Danville, Illinois.
 Commercial Tests of a Complete Line of Three-Phase Induction Motors.
 The Inductance of Alternator Armature Windings.
 Commercial Efficiency Test of Purdue University Lighting Plant.
 The Relative Intensity of the Open and Enclosed Arc Lamps.
 Trunking Between Automatic and Manual Exchanges.
 The Analysis of Alternating Current Wave Forms.
 Design and Construction of a Constant Speed Regulator for a Direct Current Motor.
 Test and Reconstruction of the Paris, Illinois, City Electric Light Circuits.
 Complete Test of the Induction Motor Generator Set in Power Plant.
 The Design, Construction, and Test of a Voltage Regulator.
 Permeability Tests of Commercial Iron.
 The Measurement of Current and Reactance by the Roland Electrodynamometer.
 A Study of the Insulating Properties of Lava.
 The Composition of Irish Potatoes as Affected by Different Soils and Fertilizers.
 The Relations of Chemical Composition to the Plant-producing Powers of Indiana Soils.
 The Cedar Rusts of North America.
 A Study of the Microscopic Character of Certain Woods with Reference to Their Strength.
 Locomotive Performance as Affected by Different Forms of Exhaust Pipes.
 A Study of the Effect of Compression in a Simple Steam Engine.
 The Equipment of a Gasoline Engine Factory.
 The Effect of Superheated Steam upon the Performance of a Single Expansion Locomotive.
 Some Values of Rotation Losses in the Curtis Steam Turbines.

The Floating Caisson.

An Investigation of the Effect of Steam and Dry Heat upon the Mechanical and Physical Properties of Wood.

A Study of Foundations for Steel Buildings of Chicago.

An Investigation of the Value of a Proposed Hydro-electric Development.

The Design of a Double-track Viaduct.

A Study for the Location of a Union Depot at Cincinnati, Ohio.

A Study of the Protection of Telephone Apparatus.

The Electrical Equipment of the New Plaza Hotel, New York City.

Design for a High Tension Transmission System for LaFayette, Indiana.

The Temperature Coefficient of Insulation Resistance of Rubber-covered Wire.

A Photometric Study of the Nernst Electric and Welsbach Gas Lamps.

Theory and Development of the Private Branch Telephone Exchange.

Investigations in the Theory and Action of Telephone Circuits.

The Supply of Electric Light and Power to Governor's Island, New York Harbor.

The Medical School.—The union in 1905 of three established medical colleges of the State to form one school under the direction of Purdue University seemed at the time a step which promised much for medical education in Indiana. All conditions were favorable for the development of a single strong school, to be eventually under the care of the State and to become the center of medical teaching and research. The step was commended as a sensible settlement of a long period of competitive activity on the part of rival schools, and it was felt that a new era had dawned in medical education so far as our own State was concerned. Subsequent developments showed, however, that such hopes were not to be realized without further delay and conflict.

There arose, at once, a determined opposition on the part of Indiana University, which took the form of establishing a rival school and seeking to undo or prevent that which Purdue University sought to achieve. Before the General Assembly bills were presented by opposing factions authorizing each of the State Universities to conduct medical schools in Indianapolis, and a contest arose which attained to such intensity as to awaken the regrets of the friends of both institutions, and alienate the sympathy and interest of members of the Legislature. As a result, both measures were rejected and no legislation was effected on the matter.

Up to this time, therefore, the State has declined to accept the gift of property tendered through Purdue University, or to ratify the action of the institution in assuming the management of the combined medical schools.

The whole matter rests *in statu quo*. The agreement entered

into with the medical schools does not and can not entail the use of University funds. The school is self-supporting and may continue indefinitely in its present method of operation. Meantime the conditions of medical education are unsettled and demoralized; indeed young men and young women are leaving the State for that training which they should find at home. The attainment of the desired end, viz., a single, strong, medical school uniting and serving all interests, seems as remote as ever. Purdue's interest in this whole matter has been based solely on the wish to contribute toward a progressive educational step for the benefit of the State, and that this end has not been realized is due entirely to opposing interests which it was impossible to anticipate.

Alumni.—A notable feature of the year has been the growth of interest and organization on the part of the alumni. Active alumni associations now exist at Chicago, Cincinnati, Cleveland, Fort Wayne, New York, Indianapolis, Pittsburg, Schenectady and St. Louis. An alumni secretary, in the person of Miss Ethel Spaulding, '05, has been engaged throughout the year in collecting data, in correspondence, and in preparing an accurate register of all graduates. At the close of the year there were only thirty-five of the nearly three thousand regular graduates of the University whose addresses and personal statistics were unknown.

Two publications were issued in the interests of the alumni during the year, a news bulletin sent out in January to all alumni, and an Alumni Register in June.

Over two hundred alumni registered as in attendance upon the commencement exercises and by their enthusiastic participation in the events of the week showed their continued interest in their Alma Mater.

Student Advisers.—With the large numbers of students now in attendance, there necessarily follows a lack of personal contact between instructors and students which is felt to be a serious loss, especially in the case of the younger men. In order, in a measure, to counteract this, a plan has been inaugurated of assigning each freshman student to a member of the faculty in the capacity of a personal adviser and friend. After a year's experience it is evident that this arrangement is capable of much good to the individual student and it is to be continued.

The Library.—Substantial progress has been made in the work of developing the library. The number of volumes and pamphlets now reaches 22,334. Two thousand and six volumes were added during the year. Advancement has been made in cataloguing and

binding. The library is open every day, including Sunday afternoons, and every evening except Sunday. There was during the year an average daily attendance of about 350. The capacity of the library as regards both books and room for their use, has already been far overreached and the existing need must be met in the near future by the erection of an adequate and suitable library building.

Federal Appropriations.—An important accession to the resources of the University has come through the passage of an act of Congress, approved March 4, 1907, increasing the appropriation to the land grant colleges \$5,000 each year for five successive years. The use of these funds is limited to the maintenance of instruction in certain branches, although a portion of the income may be used in "providing courses for the special preparation of instructors to teach the elements of agriculture and the mechanic arts." The full text of the act is printed in a later part of this report.

Student Publications.—The Purdue Exponent, a student publication established some eighteen years since and published at more and more frequent intervals, appeared for the first time as a daily during this year. The paper is supported entirely by the student body and its successful maintenance as well as its satisfactory character throughout the year, have been highly creditable to the students.

A new periodical has been started by the students in the School of Agriculture, to be a monthly bearing the name of "The Purdue Agriculturist." Its purpose is to give greater publicity to the work of the School of Agriculture and to disseminate knowledge of progress in agricultural science and practice.

Public Lectures and Entertainments.—During the year a considerable number and variety of lectures, addresses, and entertainments were given at the University under the auspices of one or another organization. For the most part these affairs were educational in plan and purpose, and contributed in no small degree to the intellectual recreation and development of the students. Members of the faculty had a prominent part in these programs, and many others not connected with the University have given generously of their time and ability without compensation. To all these grateful acknowledgment is due on behalf of the institution.

1. At the University weekly convocations, held on Wednesday mornings at 11 o'clock, in addition to the members of the faculty, the following persons have spoken:

Rev. H. T. Gary, LaFayette.

President Robert L. Kelly, Earlham College.

Professor R. J. Aley, Indiana University.

Rev. J. Wilbur Chapman.

Mrs. Mary Flanner, Indianapolis.

Hon. D. P. Baldwin, Logansport.

President Edwin Holt Hughes, DePauw University.

Dr. J. B. Lee, Milwaukee.

President John Cavanaugh, Notre Dame University.

2. A lecture course, managed by a committee of the faculty, to which season tickets were sold to students and town people at one dollar and fifty cents each, included the following numbers:

Lectures by Frederick Warde, S. Parkes Cadman, Hamlin Garland and Booker T. Washington.

Reading by Bertha Kunz-Baker.

Musical recitals by Madam Schumann-Heink, the Kneisel Quartet, Henri Ern and Helen Waldo, and a series of three organ recitals by Clarence Dickinson.

3. A series of engineering assemblies organized by the instructors of the engineering schools provided fifteen addresses upon special engineering subjects. Beside members of the faculty, the following gentlemen contributed to these programs:

Hon. Addison C. Harris, Indianapolis.

Professor Morgan Brooks, University of Illinois.

Professor R. L. Sackett, Earlham College.

President W. S. Johnson, Johnson Service Co., Milwaukee.

Professor Dugald C. Jackson, University of Wisconsin.

Wilson E. Simons, President Pioneer Cast Steel Truck Co., Chicago.

Harrington Emerson, Counselling Engineer, Topeka.

F. A. Barbour, Sanitary Engineer, Boston.

Professor Ira Baker, University of Illinois.

Dr. Elwood Mead, U. S. Department of Agriculture.

4. Miscellaneous Addresses—

Hon. W. J. Bryan, Nebraska—Address before University.

Hon. L. H. Kerrick, Illinois—Address before Farmers' Institute Conference.

Hon. F. A. Cotton, Indianapolis—Address before Farmers' Institute Conference.

Dr. H. E. Barnard, State Board of Health—Address to Graduates in Pharmacy.

President George L. Mackintosh, Wabash College—Address to Graduates in Medicine.

Hon. Charles W. Miller, ex-Attorney General—Memorial Day Address.

Rev. John H. Boyd, Evanston, Illinois—Baccalaureate Address.

Professor John M. Coulter, University of Chicago—Commencement Day Address.

An author's reading was given on May 22d, in honor of Miss Evaleen Stein, in which Mr. Meredith Nicholson, Mr. George Ade, Mr. Charles Major and Dr. James Whitecomb Riley participated.

The American Society of Mechanical Engineers, in connection with its annual meeting at Indianapolis, paid an official visit to the University on May 31st, and held one regular session in Fowler Hall, at which prominent members of the society presented papers.

Under the auspices of the Senior Class, out-of-door presentations of "As You Like It" and "Midsummer Night's Dream" were given by the Ben Greet Players.

In addition to the above, the various student societies, religious, technical, and literary, were addressed by a considerable number of persons not connected with the University.

Research.—In an educational institution concerned largely with the natural sciences and their applications, the work of research is second only in importance to that of instruction.

It has, therefore, become a recognized policy at Purdue not only to instruct students in the sciences and their application, but to be constantly engaged in efforts to solve some of the many problems which are of importance in the industries, the business, and the life of its constituents. In the conduct of such investigation, the student frequently has some active share, and always an interest. The results are contributions to the world's knowledge, published and disseminated without cost, and available to all without restriction.

The value to the State of an institution like Purdue University is only partially expressed through its courses of instruction. It serves the public equally through the utilization of its forces, its equipment, and its men, in the study and solution of unknown or heretofore unsolved problems. The range of such work as undertaken at Purdue in a single year is wide, extending from the most

practical questions in agriculture to researches in pure science, including public health; to the undeveloped resources of the State; to transportation, manufacturing, engineering, and social economy. Besides these researches, thousands of inquiries are answered; advice is given; expert testimony or opinion submitted, and tests, analyses, and examinations made for private parties.

This phase of the University's activities is one concerning which the general public is but imperfectly informed. It should, however, conceive of the institution as a great bureau with two principal phases of effort; the one instructional, the other the engaging of its scientific forces in the service of the community in the way of study, research and advice.

Some of the more important undertakings of this kind during the year may be outlined as follows:

The notable investigations upon locomotive performance have been continued under a grant to Dean Goss by the Carnegie Institution. The particular subject of study during the year has been "the use of steam superheating devices" with the object of determining the economy or desirability of this principle in locomotive practice.

The work of timber testing in cooperation with the Bureau of Forestry, has gone forward with unabated energy toward the collection of data calculated to establish standards for the physical qualities of our native timber materials. These studies have also included many tests of a practical sort upon a variety of manufactured articles and upon timber treated with preservatives.

In cooperation with the various railway associations, investigations and tests looking toward the standardizing and perfecting of railway equipment such as couplers, brake shoes, air brake mechanism, etc., have been carried on.

The increasing use of internal combustion engines has led to the addition of types of this apparatus to the laboratory and the beginning of thorough studies of their efficiency. The fifty horsepower gas producer and engine lately installed, has served as the basis for important preliminary studies in this field as well as the various gas and gasoline engines.

In forestry, practical studies of the rate of tree growth under varying conditions and the propagation of tree forms have yielded valuable results.

In the bacteriological laboratory, a large number of examinations of pathological material have been made and also studies of

practical matters, such as sanitary methods of sweeping, liquid dentifrices, etc.

A variety of physiological problems have been under investigation, among others, the effect of potassium iodide on the salivary glands, upon the activities of ferments in the eggs of star fish and sea urchins, and the effect of hydrogen peroxide on rythmical contractility.

In zöology, studies upon the habits and life history of certain marine forms have been conducted.

Mathematical and experimental investigations of the telephone circuit have been made in the electrical laboratory and also a systematic study of the methods of the magnetic testing of iron and steel.

The study of the botanical family of rusts which has been progressing for several years has been pushed with unusual vigor during the year. The work is of great difficulty and value in its economic bearing on crop productions.

PUBLICATIONS.

The University.

Bulletin No. 1, Vol. VII.—Announcement of Winter School of Agriculture.

Bulletin No. 2, Vol. VII.—Annual Report of the President and Officers of the University.

Bulletin No. 3, Vol. VII.—Circular of Information to Prospective Students.

Bulletin No. 4, Vol. VII.—Annual Catalogue.

Bulletin No. 5, Vol. VII.—Announcement and Catalogue of the School of Pharmacy.

Alumni Bulletin.

Alumni Register.

A Training Course for Teachers of Rural Science.

The Experiment Station.

Regular Bulletins.

Bulletin No. 114, Vol. XIII. August, 1906, pp. 289-308. Illustrations 1. Winter wheat. By A. T. Wiancko and M. L. Fisher.

Bulletin No. 115, Vol. XIII. December, 1906, pp. 309-337. Illustrations 7. Steer feeding. By J. H. Skinner and W. A. Cochel.

Bulletin No. 116, Vol. XIII. December, 1906, pp. 338-364. Illustrations 11. The hand separator and the gravity systems. By O. F. Hunziker.

Bulletin No. 117, Vol. XIII. February, 1907, pp. 365-394. Maps 1. Results of co-operative tests of varieties of corn, wheat, oats, soy beans and cow peas. By A. T. Wiancko.

Bulletin No. 118, Vol. XIII. March, 1907, pp. 395-423. Illustrations 14. How to control the San Jose scale and other orchard pests. By James Troop and C. G. Woodbury.

Bulletin No. 119, Vol. XIII. March, 1907, pp. 424-436. Illustrations 1. Indiana plant diseases in 1906. By Frank D. Kern.

Bulletin No. 120, Vol. XIII. March, 1907, pp. 437-460. Illustrations 7. Soy beans, cow peas and other forage crops. By A. T. Wiancko and M. L. Fisher.

Bulletin No. 121, Vol. XIII. May, 1907, pp. 461-538. Maps 1. Commercial fertilizers. By W. J. Jones, Jr., and O. C. Haworth.

Bulletin No. 122, Vol. XIII. June, 1907, pp. 539-554. Alfalfa in Indiana. By A. T. Wiancko.

Report—Nineteenth. July 1, 1905, to July 1, 1906, pp. 62. By Arthur Goss, Director.

Circulars.

No. 1. October, 1906, pp. 1-13. Illustrations 2. Hints on preparing for and holding local corn shows. By A. T. Wiancko and M. L. Fisher.

No. 2. November, 1906, pp. 1-14. Illustrations 10. The selection, preservation, and preparation of seed corn. By A. T. Wiancko and G. I. Christie.

No. 3. December, 1906, pp. 1-10. Corn stalk disease. By R. A. Craig.

No. 4. January, 1907, pp. 1-10. Illustrations 5. The Experiment Station. By Arthur Goss.

No. 5. December, 1906, pp. 1-4. Report of experimental work on the Randolph County Farm. By G. I. Christie.

No. 6. April, 1907, pp. 1-10. The Feeding Stuff Control Law. By Arthur Goss and W. J. Jones, Jr.

No. 7. April, 1907, pp. 1-14. Additional information concerning the Feeding Stuff Control Law. By Arthur Goss and W. J. Jones, Jr.

Press Bulletins.

No. 130, July 27, 1906. The prevention of transmissible diseases of swine. By R. A. Craig.

No. 131, August 3, 1906. The control of hog cholera. By R. A. Craig.

No. 132, August 10, 1906. Results of variety of tests of winter wheat. By M. L. Fisher.

No. 133, September 1, 1906. Fertilizers for wheat. By Arthur Goss.

No. 134, September 21, 1906. The San Jose Scale. By C. G. Woodbury.

No. 135, November, 1906. Glanders in horses. (From Bulletin No. 113.)

No. 136, February, 1907. Results of tests of varieties of oats. By A. T. Wiancko.

No. 137, June, 1907. The control of hog cholera. By R. A. Craig.

By Members of the Corps of Instruction.

J. C. Arthur—

- Eine auf die Struktur und Entwicklungsgeschichte begründete Klassifikation der Uredineen.
- North American Species of Peridermium. (With F. D. Kern.)
- The History and Scope of Pathology.
- New Species of Uredineæ, V.
- Reasons for Desiring a Better Classification of the Uredinales.
- A New Classification of the Uredinales.
- The Paired Seeds of Cocklebur.
- Notes on the International Botanical Congress of 1905.
- New Genera of Uredinales.
- Uredinales in "North American Flora."
- McAlpine's Studies of Australian Rusts.

S. Burrage—

- A Critical Study of the Methods of Sweeping and Dusting Rooms and Wards in Hospitals.
- Recurrence of Uroglena in the LaFayette City Water Supply.
- Laboratory Tests on Certain Liquid Dentifrices and Mouth Washes.
- The Technical Education of the Baker.

S. Coulter—

- Moral and Social Tendencies in Technical Education.
- The Field Trip in Nature Study.
- Rate of Tree Growth in the Glacial Soils of Northern Indiana.
- The Michillinda Sand Dunes and their Flora.
- Relation of School Curriculum to the Environment.
- The Physician as a Leader of Thought.
- Contribution of Nature Study to the Child Compelled to Leave School at Close of Eighth Grade.

J. W. Esterline—

- Report on the Magnetic Properties of Iron and Steel.
- The Leakage of High Potential Currents.

P. N. Evans—

- The effect of Sugar on Sourness.
- Some Comparative Fuel Values.

H. O. Garman—

- Mathematics of Overhaul.
- Report of Committee on Steam Railroads.

W. M. Goss—

- Locomotive Performance.
- The Value of High Steam Pressures in Locomotive Service. (In press.)
- Report of Brake Shoe Committee.
- Notes Concerning the Performance of a Cole Superheater as Applied to the Locomotive of Purdue University.

E. L. Hancock—

- The Effect of Combined Stresses on the Elastic Properties of Steel.
- Strength of Metals in Reverse Torsion.
- Lines on the Pseudosphere and Syntactrix of Revolution.

Elastic Changes of Steel Due to Overstrain.
 Strength of Steel Under Combined Stresses.
 Recovery of Steel from Overstrain.
 Report of Committee on Materials of Construction.
 Tests of Metals in Reverse Torsion.
 Text-book on "The Strength of Materials." (With S. E. Slocum.)

W. K. Hatt—

The Purdue University Impact Testing Machine. (Joint author with W. P. Turner.)
 Report on Structural Timber.
 Experiments on the Strength of Treated Timber.
 Instructions to Engineers of Timber Tests.
 Reinforced Concrete.
 Experiments on Lead and Copper Subjected to Compression.
 Report of Committee on Tests to Joint Committee of American Society of Civil Engineers.
 Report on Tests of Brake Beams.
 Aims and Methods of the Timber Tests of the Forest Service.
 Strength of Packing Boxes of Various Woods.
 Holding Force of Railroad Spikes in Wooden Ties.
 Tests of Longitudinal Shear in Timber.
 Contributions to Knowledge of Vehicle Woods.
 Experimental Researches in Reinforced Concrete.
 Report of Committee on Materials of Construction.
 Unit Stresses for Designing Timber Structures.
 Result of Recent Work on Timber Tests.

J. D. Hoffman—

Report of Committee on Tests, A. S. H. & V. E., January meeting, 1907.
 The Manufacture of Structural Steel.

H. T. Plumb—

The Braking of Electric Cars.

A. B. Smith—

Principles of the Telephone.

A. N. Topping—

Some Tests of Mercury Vapor Lamps.

The Engineering Review—

An annual of 150 pages, containing twenty-two original articles by students and instructors, was published by the combined Engineering Societies.

Besides their activities in teaching, in the conduct of the routine work of the faculty, and in investigation, many members of the University force are called upon for lectures; others take active part in the work of educational, scientific and technical societies; others are editors of proceedings and journals, and some are members of important State boards; thus, in the aggregate, they contribute of their ability to the service of the State and the public, generously and effectively.

PERMANENT IMPROVEMENTS, ADDITIONS TO EQUIPMENT, AND DONATIONS.

Chemical Laboratory.—This building, for which an appropriation of \$60,000 was made by the General Assembly of 1905, was commenced in May, 1906, and practically completed, ready for occupancy in June, 1907. It constitutes one of the most notable additions to the University buildings in recent years. The building is of plain exterior, but substantially constructed and conveniently arranged, 70 by 165 feet in outside dimensions. The materials are brick and Bedford stone. There are three working floors, including the basement; comprising in all 33 rooms; including various laboratories, offices, store rooms and preparation rooms; a lecture room seating 440 persons; recitation rooms, library, weighing rooms, etc. The laboratories are supplied with special ventilating flues. The heating is by direct radiation with automatic regulation, and the lighting is by electricity. The cost of the building, including plans, specifications and heating system, was \$59,662.35, and to this is to be added approximately \$10,000 for fixtures and furniture.

Electrical Laboratory Extension.—An addition to the Electrical building was erected in the summer of 1906, consisting of a brick and stone structure, one story high above the basement, providing a lecture room seating 300 persons, and a laboratory 50 by 100 feet in dimensions. The facilities for this crowded department were thus appreciably enlarged. The cost was \$22,772.90, including fixtures and furniture.

Land Purchase.—A tract of land comprising 52.37 acres lying about one-half mile west of the University farm and bordering on the public highway, was purchased for \$8,000. The cost is regarded as reasonable and the addition to the farm resources as very important. By lease of the Lake Erie & Western R. R. the University has acquired the use of 38 acres of land immediately adjoining the University estate on the south, for a term of three years, ending September, 1909. With the increase in the number of live stock and also in the demands of the Experiment Station for ground for experimental purposes, the need for a much larger area of land for cultivation becomes pressing.

Experiment Station Building.—The General Assembly has pro-

vided \$100,000, available October 1, 1907, for a new building for the Agricultural Experiment Station. Work on this building will be commenced as soon as the plans can be perfected.

Engineering Equipment.—The engineering laboratories have received during the year, by purchase or donations, important accessions, some of the more notable of which are as follows: A 10-ton electric crane; a DeLaval Steam Turbine of 20 horse-power; an Allis-Chalmers Corliss Engine of 90 horse-power; with centrifugal pump of 10,000 gallons per minute capacity; an Ingersoll-Rand Two-Stage Air Compressor of 90 horse-power; a Fairbanks-Morse Gas Producer and Engine of 50 horse-power; a Riehle testing machine of 200,000 pounds capacity, and a Riehle torsion testing machine of 60,000 inch pounds capacity; two Olsen testing machines of 100,000 and 30,000 pounds capacity, respectively.

The equipment of other laboratories has been increased by permanent additions of apparatus as needed.

In the dairy barn, electric lights have been installed and preparations made for the operation of grinding machinery.

Gifts.—The grant of \$5,000 by the Carnegie Institute to Dean Goss, for an investigation of locomotive performance, was exhausted during the year and an additional grant of \$3,000 per year for four years was made in January.

A premium fund of \$160 for use in connection with the butter scoring contests conducted by the Dairy Department has been contributed by a number of associations interested in promoting this industry.

The electrical laboratory has received numerous donations of apparatus and materials from the following firms: W. R. Garton & Co., Chicago; Electric Railway Equipment Co., Cincinnati; Lord Electric Co., New York; Lima Insulator Co., Lima, N. Y.; Western Electric Co., Chicago; Sumter Telephone Manufacturing Co., Sumter, S. C.; Frank B. Cook, Chicago; Electric Storage Battery Co., Philadelphia; Lafayette Street Railway Company; Lumen Bearing Co., Buffalo, N. Y.; H. W. Johns-Manville Co., New York; Star Brass Works, Kalamazoo; The Ohio Brass Co., Mansfield, Ohio; Columbia Incandescent Lamp Co., St. Louis; Crouse-Hinds Co., Syracuse, N. Y.; Rail Joint Co., Troy, N. Y.; Joseph Dixon Crucible Company, Jersey City, N. J.

The library has received by gift 223 volumes exclusive of public documents and inclusive of the books furnished by the annual gift of Dr. George Keiper, of LaFayette. By act of Con-

gress the library, in common with that of all land grant colleges, has been made a depository for public documents.

The Dairy Department has received valuable apparatus and material from the following: Walker-Gordon Laboratory, Elov Ericsson, O. Douglas, and the Vermont Farm Machine Co., as also copies of the leading dairy periodicals through the courtesy of the publishers.

The Scientific Departments have received collections of American woods from the A. R. Colburn Co. of Michigan City, and the S. Burkholder Co. of Crawfordsville; a collection of fish, embracing 28 species, from the United States Fish Commission; a set of samples illustrating starch and glucose manufacture, from C. H. Viol; and zoological specimens from Mrs. C. B. Stuart, Mrs. H. W. Moore, Mrs. O. W. Rudin, Mrs. L. R. Sale and Dr. J. W. Fahnestock of LaFayette.

A complete hot water heating system, including a sectional boiler and four radiators for experimental purposes, has been donated by the Novelty Iron Works, Canton, Ohio. Models illustrating temperature regulating devices have been given by the Powers Regulator Company of Chicago; a Yale four-cylinder, four-cycle automobile engine was donated by the Consolidated Manufacturing Company of Toledo. Other valuable apparatus and models for the experimental laboratories have been donated by The Connersville Blower Company, Connersville; The Norwall Manufacturing Company of Chicago; C. F. Splitdorf of New York; The Culver Novelty Company, Culver; Wheeler & Schebler, Indianapolis; the Hancock Inspirator Company, Boston; The Reversible Tube Cleaner Co., Worcester, Mass.; The American Blower Co., Detroit; The Peabody Coal Co., Chicago.

Loans.—A great variety of machinery and apparatus has been loaned to the University for purposes of illustration or testing. The more notable are as follows:

Four testing machines from the United States Bureau of Forestry; agricultural implements for use in the laboratory of Farm Mechanics from the Victor Manufacturing Company, New Carlisle, Ohio; The Hagen Gas Engine Co., Winchester, Ky.; The International Harvester Company, Indianapolis; The Bradley Manufacturing Co., Bradley, Ill.; electrical apparatus and materials from the Electrical Installation Company of Chicago; Moore-Mansfield Construction Co., Indianapolis; Central Laboratory Supply Co., LaFayette; The Bullock Electric Manufacturing Co.,

Cincinnati; William Wharton & Co., Philadelphia; the Fairbanks-Morse Electric Manufacturing Co., Indianapolis; Cream Separators from the Empire Separator Co., the Omega Separator Co. and the Sharpless Separator Co. A Rutenber four-cylinder gasoline automobile engine by the Western Motor Company of Logansport, and carburetors by the Byrne-Kingston Co. of Kokomo, and Wheeler & Schebler Company of Indianapolis.

THE MEMORIAL BUILDING.

Progress toward the realization of the plans for the memorial building in honor of those students who lost their lives in the railway accident of October 31, 1903, has been disappointing. It was found early in the year that the funds available, viz.: \$75,000, were not sufficient to carry out the original conception of a building to serve all physical and social needs of the student body. When this became evident the building committee decided to confine its efforts to securing a building to be for physical recreation only, i. e., a gymnasium. A good part of the year has been consumed in developing suitable plans for such a building, only to learn finally that the limit of cost had been exceeded, so that it became necessary to make a complete change in the arrangements.

The preliminary plans, which the committee is now assured can be carried out for the available funds, contemplate a building containing a gymnasium of approximately 14,000 square feet floor area, a swimming pool, shower baths, locker space, team quarters, running track, trophy room, etc., in short all of the features of a first-class, modern gymnasium, of ample size to accommodate the present student body. It is believed that the building in accordance with this plan will be under construction during the coming year. It is awaited with impatience by the student body, and it is safe to say that no other building of like cost and dimensions could be provided which would approximate this in usefulness and popularity.

LEGISLATION RELATING TO THE UNIVERSITY.

Appropriations.—In a detailed report furnished in November, 1906, at the request of Governor Hanly, for the information of the Legislative Committee appointed to inspect and report upon the State institutions, attention was called to the needs of the University as follows:

The institution needs funds to provide buildings to care for its students properly, and in which to perform the work assigned.

The need arises from the fact that the University has for a number of years been steadily increasing in attendance.

The need has reached an acute stage at this time because the present situation represents an accumulation of unsupplied needs during the past six years.

The particular buildings needed are as follows:

1. Buildings for the Department of Engineering.
2. A building for the Agricultural Experiment Station.
3. A Library building.

The buildings for the engineering department are needed to care for students now on the grounds and towards whom the University has obligations.

The need for the other two buildings is also important but less urgent in the sense that the work required of the Station and the Library is not measured absolutely by the student attendance.

The Trustees, therefore, record all of these needs as in duty bound, but are urging attention for the present only to the first, viz., the engineering buildings.

In its report to the Legislature the committee made the following recommendation:

The committee, considering the interests of the entire State, regards the experiment station building as the most urgent need of the institution. The following specific appropriation is recommended:

For a building for the Experiment Station, including all necessary equipment\$100,000 00

This recommendation was concurred in by the Legislature, the appropriation of \$100,000 becoming available on October 1, 1907.

Acceptance of Federal Grant.—By joint resolution approved March 12, 1907, relating to the appropriation by Congress of increased funds for the Agricultural Experiment Station, as approved May 16, 1906, it was resolved—

That such grant is hereby accepted for and on behalf of Purdue University for its agricultural experiment station, and the legislative assent of Indiana is hereby given to the purpose of said grant.

Regulation of Commercial Feeding Stuffs.—An act was passed and approved March 9, 1907, relative to the inspection and sale of commercial feeding stuffs, and assigning to the State Chemist and the Experiment Station the administration of the law. The purpose is to prevent the fraudulent traffic in such materials, which, in the absence of any restriction, is shown to have become extensive.

Following is the title of the act:

An act to provide for the inspection and analysis of, and to regulate the sale of concentrated commercial feeding stuff in the State of Indiana; to prohibit the sale of fraudulent or adulterated concentrated commercial feeding stuffs; to define the term concentrated commercial feeding stuffs; to provide for guarantees of the ingredients of concentrated commercial feeding stuffs; for the affixing of labels and stamps to the packages thereof, as evidence of the guarantee and inspection thereof; to provide for the collection of an inspection fee from the manufacturers of, or dealers in concentrated commercial feeding stuffs; to fix penalties for the violation of the provisions of this act, and to authorize the expenditure of funds derived from the inspection fees.

Farmers' Institutes.—An act was passed and approved March 8, 1907, authorizing county auditors to draw warrants on the county treasury for a sum equal to that raised and expended by the county farmers' institute organization, provided that such appropriation shall not exceed \$100 for any one year.

The purpose of this is to encourage the better organization and the self-support of the county institutes, in order that the State appropriation may be devoted to furnishing speakers and not to defraying local expenses.

Increased Federal Appropriation.—An act of Congress approved March 4, 1907, adds materially to the means of the University for the maintenance of courses of instruction. Following is the full text of the act, popularly known as the "Nelson Act:"

That there shall be, and hereby is, annually appropriated out of any money in the Treasury not otherwise appropriated, to be paid as herein-after provided, to each State and Territory for the more complete endowment and maintenance of agricultural colleges now established, or which may hereafter be established, in accordance with the Act of Congress approved July 2, 1862, and the Act of Congress approved August 30, 1890, the sum of \$5,000, in addition to the sums named in said act, for the fiscal year ending June 30, 1908, and an annual increase of the amount of such appropriation thereafter for four years by an additional sum of \$5,000 over the preceding year, and the annual sum to be paid thereafter to each State and Territory shall be \$50,000, to be applied only for the purposes of the agricultural colleges as defined and limited in the Act of Congress approved July 2, 1862, and the Act of Congress approved August 30, 1890.

That the sum hereby appropriated to the States and Territories for the further endowment and support of the colleges shall be paid by, to and in the manner prescribed by the Act of Congress approved August 30, 1890, entitled "An Act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts established under the provisions of the act of Congress approved July 2, 1862," and the expenditure of the said money shall be governed in all respects by the provisions of the said act of Congress approved July 2, 1862, and the said act of Congress approved August 30, 1890: Provided, That said colleges may use a portion of the money for providing courses for the special preparation of instructors for teaching the elements of agriculture and the mechanic arts.

FARMERS' INSTITUTES.

This enterprise, for which the University is responsible, by law, has been conducted during the year along previously established lines but with increasing value and efficiency. It is gratifying to know that the Farmers' Institutes of Indiana are regarded in other states as models of their kind in that their purpose is strictly educational, their organization effective, and their growth and influence constantly increasing.

As this work goes on new demands arise and developments appear which could not have been foreseen a decade ago. Notable in this respect is the desire for improvement in all that pertains to rural life, not to its industries alone, but to its social, intellectual and educational activities as well. It is evident to the most unprejudiced observer that country life is to undergo great changes due to improvements in transportation and communication. These changes ought greatly to enrich and ennoble rural conditions. To the thoughtful, country life should be the most attractive of all, especially with the facilities which modern improvements bring to it. It would seem to be the logical thing, therefore, for the farmers' institutes to promote and direct this sentiment, and include in their scope all sane and reasonable discussions looking not only to the improvement of agricultural methods, but to the home, the school, and whatever promises to make rural conditions more attractive and healthful, as well as profitable.

So the institutes are giving attention, through the women's auxiliaries, to the problems of the home. Lectures on domestic science are found on the programs of most of the institutes; special sessions are frequently held for young people in cooperation with the public schools; school boys are instructed in better methods of corn culture or other farming operations; and, in many counties as a result of good leadership, clubs have been formed for the prosecution of this work. Competitive exhibits of the work and products made by boys and girls are frequently held in connection with the institutes. The growth of interest along these lines shows plainly what may be expected when once the rural population is awakened to its opportunities.

The following table gives a summary of institute statistics for a term of years:

YEAR.	No. Counties Holding Institutes.	Total No. Institutes.	Average Attendance.	Aggregate Attendance.
1889-90.....	41	50	.....	.....
1890-91.....	41	41	.....	.....
1891-92.....	90	102	.....	.....
1892-93.....	89	95	.....	.....
1893-94.....	92	95	.....	.....
1894-95.....	92	97	118	11,446
1895-96.....	92	103	272	28,016
1896-97.....	92	104	232	24,128
1897-98.....	92	108	272	29,376
1898-99.....	92	102	250	25,500
1899-00.....	92	104	269	27,976
1900-01.....	92	104	279	29,016
1901-02.....	92	197	191	37,603
1902-03.....	92	179	192	34,226
1903-04.....	92	175	338	59,189
1904-05.....	92	226	329	74,467
1905-06.....	92	250	197	49,325
1906-07.....	92	273	181	49,476

The Legislature of 1907 enacted a law intended to increase the available means for the support of institutes, by authorizing amounts, to aid in defraying the local expenses of meetings and contests. One provision of the law is that there should be a paid membership of the institute association as a basis for county aid. In this way there may be available to each county institute as much as \$200 annually for the current expenses. This provision is one of the most generous existing in any of the states. It frees the State appropriation from the burden of defraying the expense of meetings and enables its application principally to the employment of speakers. The new law supplements previous laws admirably and emphasizes the principle that the members of each county association should contribute something towards its maintenance.

THE AGRICULTURAL EXPERIMENT STATION.

The work of the Experiment Station has proceeded along the same general lines as in the previous year, but has been characterized by an extension of its scope. The officers of the station have been embarrassed by the large demands upon their energies growing out of the increased resources. While they have been compelled to carry on a very largely increased work, taxing the resources of the organization, they have at the same time been called upon to develop new lines of research and this, under the circumstances, has not been an easy task. The work of an Agricultural Experiment Station falls into two general classes: That of a temporary character, calculated to give immediate results of a more or less simple and popular nature, and lines of investigation which may be almost purely scientific which will extend over years of time and the results of which, while fundamental to the principles and practice of agriculture, may not be of immediate practical use. Both of these kinds of effort are of great importance and should be included in the policy of every Agricultural Experiment Station. Our station is provided with means for both of these avenues of effort and is fulfilling its duty in both regards admirably.

In addition to the work of answering inquiries, furnishing information, sending out speakers to farmers' institutes, equipping corn trains, etc., the serious research work of the station has fallen into four or five lines as follows:

In the agricultural department, attention has been given to the improvement of the staple crops of the State by means of breeding, mainly with relation to wheat and corn. Some notion of the extent of this work may be obtained from the fact that 20,000 individual wheat plants were under observation and record, and that seventeen experiments in corn breeding were carried on in different localities in the State during the year. Cooperative crop tests having reference to the adaptability of variety and soils, were conducted at 700 places in the State. That this work is highly appreciated is shown by the number of requests to engage in such cooperation, which far exceed the ability of the station to provide.

In Animal Husbandry, extensive cattle feeding experiments have been carried on with a view of securing definite information concerning the influence of age on the economy and profit of beef

production, and also of the relative value of feeding steers for short and long periods; also experiments in determining the efficiency of a variety of staple cattle foods in different combinations. In all, 100 head of cattle were fed in these experiments.

The Botanical Department has devoted its particular energies to the continuation of the very valuable study of plant rusts, which has now been going forward here for several years. The importance of this work consists in acquiring knowledge of the habits and life history of these organisms which, in many cases, are so destructive to crops. This work has been for the most part sustained from the Federal appropriation under the Adams Act, Substantial progress has been made.

In the Veterinary Department, hog cholera has been the principal subject of study. This baffling and destructive disease has been under observation here for a number of years. It will not be easy to determine either its cause or an effective remedy, but such knowledge can in no case be gained except as a result of long and careful study, and the Station has entered upon this piece of work in the hope of finding some definite solution of the problem.

In the Horticultural Department there has been carried out a variety of practical studies upon the diseases affecting the melon industry; upon the breeding of tomatoes with reference to the yielding and market quality; in testing the varieties of fruits and vegetables; in lectures and demonstrations regarding the best methods of controlling orchard diseases, insect pests, etc.

The Dairy Department has been occupied with the propaganda of distributing knowledge and encouraging interest in the dairying industry. A representative has been kept in the field the greater part of the time testing herds, giving lectures, and lending practical assistance to commercial dairies and creameries. Butter-scoring contests have been held each month at Indianapolis with encouraging educational results. A special chemical laboratory has been equipped for more exact laboratory investigation of the dairy problems.

The Chemical Department has given attention to the question of soil improvement in all its phases, including studies of unproductive soils and experiments with fertilizers, as well as investigations of the quality of crops grown on different soils. Cooperative test work has been conducted in many places and some very interesting and important results have been obtained. The State Chemist's work, which is under the direction of the Experiment Station, has had in charge the fertilizer extension and control as

heretofore. It has analyzed 871 samples of fertilizer collected in the open market. There is a constantly increasing consumption of artificial fertilizers which will doubtless continue indefinitely. The total sales of such materials in the State during the year covered by this report, amounted to over 98,000 tons, representing a value of over two and one-half million dollars. The working of the fertilizer control law, as administered by the Station, effectively prevents fraud and deception in this business and saves, to the consumer of these materials, a very large sum.

The last session of the legislature enacted a law relative to the inspection and control of commercial feeding stuffs, assigning its administration to the University authorities. This work has also been placed under the supervision of the Experiment Station. Under the terms of the act, the State Chemist is required to administer the law. It relates to one of the large commercial interests of the State and involves many persons and business organizations. No attempt was made to put the law into force until after July 1st, but a large amount of work was done prior to that time in notifying dealers in feeding stuffs of the intent and purposes of the law, and in preparing for its administration. This naturally has imposed upon the Station staff large additional burdens, necessitating the employment of more chemists, inspectors and clerical force. When the law is in full force its administration will require the outlay of a large amount of money for which it is the intent of the act that provision should be made by the collection of fees. It will require some time to ascertain definitely whether the income derived from this source will be sufficient to sustain the work.

The appropriation of \$100,000.00 by the legislature for a new building for the Experiment Station meets a pressing need. The preliminary plans for this building have been worked out by the members of the Station staff and it is expected will provide one of the best arranged and equipped buildings for experiment station work in the country. The building will be one of the largest at the University and a structure of which the entire agricultural interests of the State will be proud.

An important need of the Station at the present time is a larger area of land. At the present time it shares with the School of Agriculture, the University farm amounting in all to less than 200 acres. This area is unsufficient for the needs of either the Station or the School and it would seem as if some provision must be made in this respect in the near future for both of these departments.

THE NEEDS OF THE UNIVERSITY.

It is impossible to make a complete report of an institution without reference to its needs. No report in recent years has omitted reference to this subject for the reason that the institution has grown in attendance and scope more rapidly than its resources. In the last annual report these conditions were described in detail and a plea was made for buildings to accommodate the excessive number of students enrolled in the institution. The plea was disregarded and we now face a condition under which the work of the University is positively hindered and restricted through lack of proper facilities, to care for our classes. It can be truthfully said that the needs of the University were never so serious as at the present time and yet the record shows that no provision whatsoever was made at the last meeting of the General Assembly. Meantime the attendance increases and hampering conditions are intensified. It is discouraging to the officers and faculty, who point to a record of faithful and economical management, and in most instances to self-sacrifice, to be compelled to meet these conditions without any prospect of relief in the future. To whom shall we make appeal? What course of action shall be taken? We can not send away our students. We ought not to be expected or required to do poorer work of instruction. We have made our appeal to the State, whose property the institution is, and it has not been heeded. We can do no more. Neither can we in duty cease to set forth what, in our judgment, should be done to maintain the institution in its state of efficiency, to care for its students and to fill the place which it should continue to occupy in the State of Indiana.

Our present needs are for buildings, and the first among these are buildings to accommodate the schools of engineering, principally in the branch of laboratory practice and practical mechanics. Our present facilities for this work are no larger than when they were constructed in 1895. Their capacity as designed at that time is less than half the present number of students. We have been asking for the past six years for shops, drawing rooms, and laboratory space. These needs are cumulative as the institution grows. The cost of supplying what we now need is large and is bound to be larger in future. It is estimated that not less than

\$300,000 will be required to provide buildings of the plainest character and equipment to accommodate the present number of students. I regard this as not only the most pressing need of the institution, but a need of such importance that it affects the very life and future of the University.

Under the Act of Congress establishing the institution, we are required to administer instruction in military tactics. This is one of the conditions under which the Federal government makes large appropriations to the University. As the institution has grown, the number of students required to take this instruction has increased correspondingly until the number of students annually enrolled in this course is over 800. The only building available for the storage of equipment and for drill practice in inclement weather, is a frame structure, one of the oldest on the campus, which would be inadequate to accommodate 100 men. The government furnishes officers to give this instruction without charge to the University, and furnishes all the equipment necessary for it. The faith of the State is pledged to administer this work in a satisfactory way. Under the present conditions, the instruction can not be given properly. The officers sent out from the War Department to inspect this work criticize it severely and have repeatedly called attention to the inadequate provision made for its administration. The work of this department is of the utmost importance and should not be neglected or undervalued. In order to administer it properly, there should be a plain, substantial, roomy structure provided, which, it is estimated, would cost upwards of \$30,000 or \$40,000.

The Library, which is growing rapidly in value and importance, has no proper place for its reception or use. Our books are stored on three floors of the building, which is not fire-proof and is used for many other purposes. The books are not safe, not accessible and can not be properly cared for under these conditions.

There is a gratifying and rapidly increasing interest in the work of the School of Agriculture. It is of the utmost importance that the needs of this department be amply supplied. Two of the most important phases of agriculture in this State are animal husbandry and dairying. In both of these our students and citizens show great interest and are demanding better facilities. There is needed for the better accommodation of the collection of live stock, to complete the cattle barn, one wing of which for dairy purposes, was built some years ago. It is estimated that this structure would cost \$10,000. In order to conduct the instruction in dairying, it

has been found not only necessary, but desirable to install laboratories and equipment for carrying out all the operations of handling milk and producing butter and cheese. This work has been started in the basement of the agricultural building, a building originally intended for class rooms and offices only. This department should have a small but suitably arranged building devoted to its work where commercial, as well as laboratory operations attendant upon the instruction of classes as well as the researches of the experiment station could be properly attended to. Such a building would probably cost upwards of \$25,000.

Another pressing need of the School of Agriculture is a larger area of land for farm purposes. Not only for the production of forage crops for maintaining the large herds, but also for experimental plats and the use of the experiment station. An estate of 1,000 acres would be none too large to meet all the requirements of this department.

TREASURER'S REPORT.

As Treasurer of the Board of Trustees of Purdue University, I hereby submit my report of moneys received during the year ending June 30, 1907:

1. Regular income for maintenance of departments of instruction—
 - (a) Federal appropriation (Morrill Fund) .. \$25,000 00
 - (b) State Educational tax (General Fund) .. 155,637 39
 - (c) Interest on endowment fund..... 17,000 00
 - (d) From miscellaneous sources 72,331 47

Total	\$269,968 86
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2. Income for maintenance of the Agricultural Experiment Station—

Federal appropriations—	
(a) Hatch Fund	\$15,000 00
(b) Adams Fund	7,000 00
State appropriation for eleven months ending	
September 30, 1907	22,916 67
Miscellaneous Fund	23,071 91
Total	\$67,988 58
3. Appropriation for Farmers' Institutes for eleven months ending September 30, 1907..... \$9,166 67
4. Specific appropriation for Chemistry building..... 58,623 77

REPORT OF THE SECRETARY OF THE BOARD OF TRUSTEES.

As Secretary of the Board of Trustees of Purdue University, I hereby certify to the correctness of the following statements of receipts and disbursements, viz.:

1. For maintenance of the Departments of Instruction.
2. For maintenance of the Agricultural Experiment Station.
3. For the maintenance of Farmers' Institutes.
4. For the erection of the Chemical Laboratory.

All for the year ending June 30, 1907, except as specifically indicated from certain State appropriations for the period of eleven months from November 1, 1906, to September 30, 1907.

EDWARD A. ELLSWORTH,
Secretary of Board of Trustees of Purdue University.

1. FUNDS FOR THE MAINTENANCE OF THE DEPARTMENT OF INSTRUCTION.

A. GENERAL FUND.

Dr.

Received of State as per report of Treasurer.....\$155,637 39

Cr.

Salaries of instructors	\$66,315 01
Improvements to buildings and grounds	14,106 34
Employes	12,405 52
Supplies	10,044 73
Insurance	2,298 61
Engineers and firemen	3,563 08
Water	1,145 29
Books and periodicals	3,028 83
Care of grounds	1,620 40
Express, freight and hauling	1,489 96
Care of buildings	6,656 69
Labor	3,019 60
Live stock	1,586 83
Repairs	3,399 61
Furniture and fixtures	2,514 45
Apparatus and machinery	8,041 80
Heat	7,369 40
Feeding Stuff	3,301 03
Light	482 45

Postage	\$811 03
Commencement	168 00
Rebate of fees	541 50
Trustees	616 85
Printing and stationery	409 76
Telephones	356 44
Expense securing faculty	105 40
Traveling expenses	128 31
Catalogues and postage	65 31
Telegrams	27 70
Lectures	16 46
Miscellaneous	1 00
<hr/>	
Total	\$155,637 39

B. MISCELLANEOUS FUND.

Dr.

Balance June 30, 1906	\$27,312 57
Receipts as per report of Treasurer.....	72,331 47
<hr/>	
	\$99,644 04

Cr.

Salaries of instructors	\$38,766 71
Apparatus and machinery	11,369 04
Real estate	8,000 00
Furniture and fixtures	4,990 59
Catalogues and postage	2,345 28
Supplies	4,776 88
Improvements to buildings and grounds	2,210 64
Printing and stationery	1,495 43
Employees	933 00
Commencement	346 25
Trustees	193 80
Care of grounds	157 35
Publications	108 75
Engineers and firemen	298 33
Heat	204 30
Insurance	375 00
Lectures	207 88
Books and periodicals	385 28
Light	378 74
Traveling expenses	354 39
Labor	338 33
Miscellaneous, including premium on bonds, military equipment, etc.....	206 00
Repairs	779 75
Care of buildings	502 67
Postage	216 75
Live stock	167 16

Express, freight, hauling	\$66 01
Expenses securing faculty	40 00
Advertising	10 00
Inspection trips	68 75
Rebate of fees	99 75
Feeding stuff	58 18
Telephones	2 25
Telegrams	2 19
¹ Balance	19,188 61

Total	\$99,644 04
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C. ENDOWMENT FUND.

Dr.

Receipts as per report of Treasurer	\$17,000 00
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Cr.

Paid salaries of instructors	\$17,000 00
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D. MORRILL FUND.

Dr.

Receipts as per report of Treasurer	\$25,000 00
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Cr.

Paid salaries of instructors	\$25,000 00
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2. FUNDS FOR MAINTENANCE OF THE AGRICULTURAL
EXPERIMENT STATION.

A. FEDERAL APPROPRIATIONS.

Dr.

Received as per report of the Treasurer—

From the Hatch Fund	\$15,000 00
From the Adams Fund	7,000 00

Cr.

	<i>Hatch Fund.</i>	<i>Adams Fund.</i>
Salaries	\$8,675 44	\$2,938 19
Labor	2,207 30	38 75
Publications	1,546 02	
Postage and stationery	485 35	38
Freight and express	86 81	6 60
Heat, light, water and power	60 27	
Chemical supplies	96 55	1,286 24

¹This balance was reserved to cover outstanding orders and contracts for supplies and repairs in preparation for the coming year's work, which must be anticipated before the beginning of the summer vacation and the close of the fiscal year.

Seeds, plants and sundry supplies.....	\$463 28	\$203 33
Feeding stuff		5 00
Library	214 68	502 58
Tools, implements and machinery	158 59	47 40
Furniture and fixtures	47 20	
Scientific apparatus	166 50	1,468 14
Live stock		234 50
Traveling expenses	548 66	251 00
Buildings and land	243 35	17 80
Totals	\$15,000 00	\$7,000 00

B. STATE APPROPRIATIONS.

Dr.

Received as per the report of the Treasurer for eleven months
ending September 30, 1907..... \$22,916 67

Cr.

GENERAL.

Salaries	\$2,561 45
Live stock	1,440 15
Publications	1,323 47
Printing, stationery and postage	904 12
Furniture and fixtures	514 95
Traveling expenses	492 86
Tools and machinery	330 04
Library	453 27
Sundry supplies	415 60
Exhibit of State Fair	205 81
Labor	159 99
Chemical supplies	121 30
Express, freight, hauling	141 64
Scientific apparatus	56 50
Fertilizers	31 56
Contingent expense, telephones, telegrams, etc.....	10 47
Repairs to buildings	3 50
Total	\$9,166 68

LIVE STOCK FEEDING.

Salaries	\$1,155 29
Feeding stuff	1,150 69
Live stock	1,036 05
Traveling expenses	360 01
Express, freight, hauling	344 31
Supplies	319 24
Labor	88 85
Tools and machinery	18 25

Buildings, improvements	\$77 04
Printing, stationery and postage	25 50
Contingent expenses, telephones, telegrams, etc.....	5 15
Chemical supplies	2 95
Total	\$4,583 33

CROP AND SOIL IMPROVEMENT.

Salaries	\$1,370 77
Traveling expenses	993 35
Labor	526 71
Express, freight, hauling	371 12
Fertilizers	165 00
Supplies	696 42
Exhibit of State Fair	154 16
Printing, stationery and postage	112 91
Publications	99 76
Furniture	40 75
Contingent expenses	16 26
Buildings, improvements	19 87
Library	7 00
Chemical supplies	4 25
Tools and machinery	5 00
Total	\$4,583 33

DAIRY INTERESTS.

Salaries	\$1,833 31
Traveling expenses	1,050 99
Publications	164 50
Printing, stationery and postage	181 23
Express, freight and hauling	156 54
Furniture	206 30
Scientific apparatus	164 60
Supplies	575 66
Tools and machinery	81 00
Labor	61 45
Contingent expenses	18 81
Chemical supplies	84 24
Buildings, repairs	4 70
Total	\$4,583 33

C. MISCELLANEOUS FUNDS.

Dr.

Balance, June 30, 1906	\$2,079 74
Received as per report of Treasurer.....	23,071 91

\$25,151 65

Cr.

Salaries "A"	\$1,685 09
Salaries "B"	1,074 96
Salaries "C"	4,939 56
Labor, month	973 07
Labor, day	18 00
Labor, hour	940 51
Publications "A," Circular 2 and Bulletin 220.....	1,251 70
Postage	117 62
Stationery and printing	2,041 65
Freight and express	139 65
Heat	694 44
Light	245 60
Water	34 50
Chemicals "A"	253 91
Chemicals "B"	272 10
Sundry supplies	774 41
Fertilizers	50
Feeding stuff	860 91
Library	1 50
Tools, etc.....	2 44
Furniture, fixtures	199 20
Scientific apparatus	85 20
Live stock "B"	2,831 25
Traveling expenses	1,529 24
Contingent expenses, telegrams, telephone, etc.....	149 09
Contingent expenses, membership fees	15 00
Buildings "C"	5 80
Balance	4,014 75

Total	\$25,151 65
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3. FUNDS FOR MAINTENANCE OF FARMERS' INSTITUTES.

Dr.

Receipts as per report of Treasurer for eleven months ending September 30, 1907	\$9,166 67
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Cr.

Expense of holding 313 Winter and Summer Institutes	\$6,679 73
Salary of superintendent	1,250 00
Clerical work	493 62
Printing, stationery and postage	294 93
Charts and cases for speakers	238 00
Traveling expenses of superintendent	68 63
Printing annual report for 1905-06.....	84 58
Express, freight, telephone, etc.....	26 95
Furniture	16 65

Supplies	\$8 58
Membership dues American Association of Farmers' Institute Workers	5 00
Total	<hr/> \$9,166 67

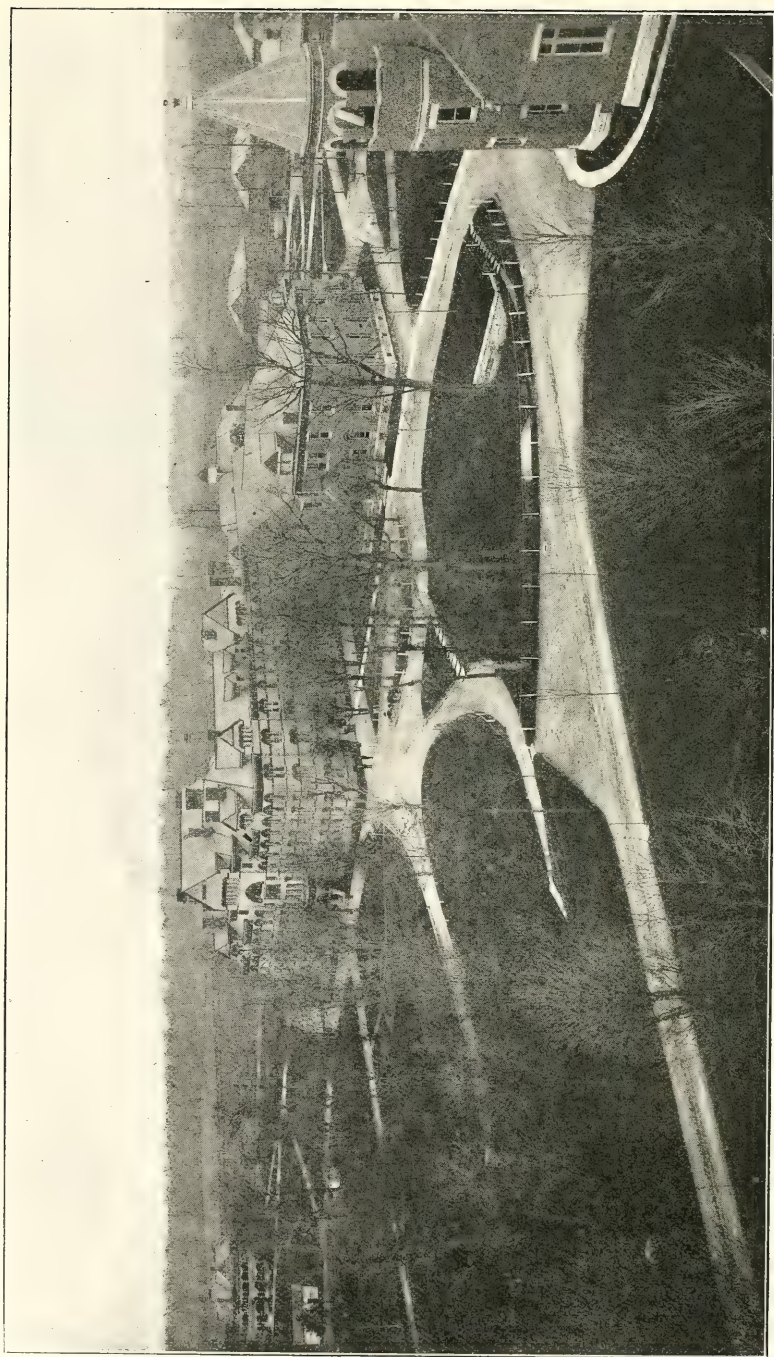
4. SPECIFIC APPROPRIATION FOR CHEMICAL LABORATORY.

Dr.

Received as per report of the Treasurer	\$58,628 77
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Cr.

Estimates in favor of contractor	\$52,106 82
Heating system	4,644 55
Plans and specifications	1,218 35
Superintendence	513 05
Fixtures	141 00
Total	<hr/> \$58,623 77



BIRDSEYE VIEW.

TWENTY-NINTH ANNUAL REPORT

OF THE BOARD OF TRUSTEES AND
OFFICERS OF THE

Indiana Soldiers' and Sailors' Orphans' Home

FOR THE

Fiscal Year Ending September 30, 1907

TO THE GOVERNOR

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING
1907.

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
INDIANAPOLIS, November 25, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, December 11, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

DECEMBER 11, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, December 11, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer December 11, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

VISITING COMMITTEES.

Grand Army.

GARRETT H. SHOVER.....	Indianapolis
S. B. MORRIS.....	Shelbyville
WILLIAM SMITH	Madison
JOHN W. SCOTT.....	Indianapolis
WILSON T. JACKSON.....	Rushville
JOHN W. ROSS.....	Connersville
HENRY C. McMAKEN.....	Fort Wayne
WOODSON S. MARSHALL.....	Marion
JOSEPH P. ILIFF.....	Richmond
F. M. VAN PELT.....	Anderson
ANDREW FITE	New Albany
JAMES L. MILLER.....	Jeffersonville

Woman's Relief Corps.

MARY E. SWAIN.....	Richmond
LUCINDA E. TAYLOR.....	Indianapolis
JANE COWAN	Terre Haute

United Spanish War Veterans.

GEO. W. POWELL, Chairman.....	Indianapolis
RUSSELL B. HARRISON.....	Indianapolis
PAUL COMSTOCK	Richmond
WILBUR S. RYMAN.....	Muncie
J. HENRY MEIBOOM.....	Jeffersonville
CHAS. TRIBOLET'	Bluffton

Sons of Veterans.

GEO. W. KRIETENSTEIN, Chairman.....	Terre Haute
HON. JOHN W. TYNDALL.....	Decatur
SID CONGER	Shelbyville
H. O. P. CLINE.....	Jonesboro
GEO. F. OGDEN.....	Wabash
DANIEL CHAPIN	Rockville
T. W. BLAIR.....	Fort Wayne
CHRIS. H. MEYER.....	Alexandria
WILL C. CONVERSE.....	Richmond
W. W. HUFFMAN.....	Anderson
F. E. WATSON.....	Goldsmith
SAM E. TWIGG.....	Pennville
O. M. HEMPLETON.....	Connersville
R. E. WARNER.....	Lafayette
H. A. FULLER.....	Chesterton
E. E. TRITTIPO.....	South Bend

Sons of Veterans' Auxiliary.

MISS CARRIE WACHTSTETTER	Indianapolis
MRS. MINNIE KREITENSTEIN	Terre Haute
MRS. MARY EVANS	Richmond
MRS. FANNIE RABB-GREEN	Rising Sun
MRS. LYDIA FITZ WILLIAMS.....	Valparaiso

OFFICERS.

Board of Trustees.

GEO. W. DUNCAN, President.....	Greenfield
LUTHER SHORT, Vice President.....	Franklin
HUGH DOUGHERTY, Treasurer.....	Indianapolis
LAURA A. CUMBACK, Secretary.....	Greensburg

Officers.

A. H. GRAHAM.....	Superintendent
H. H. WOODS.....	Financial Officer
O. E. HOLLOWAY.....	Physician
MRS. N. T. GRAHAM.....	Matron

Agent for Finding Homes for Children.

MRS. CARRIE W. GREGORY.....	Knightstown
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SCHOOLS.

FRANCES L. BANFA, Principal and Teacher of Ninth Grade.

Teachers.

BELLE A. POWERS.....	8th Grade
ANNIE L. DUNCAN.....	7th Grade
AGNES M. REA.....	6th Grade
MIRIAM TYNER	5th and 6th Grades
GRACE B. GREGORY.....	5th Grade
EMMA BYERLY	4th and 5th Grades
JULIET HOWARD	3d and 4th Grades
MARGARET RUTLEDGE	3d Grade
EMELINE J. CARLISLE.....	2d Grade
JULIE M. CARLISLE.....	1st Grade
BERTHA TYNER	Kindergarten and 1st Grade
GRACE H. NIXON.....	Stenography and Typewriting
PAULINE W. STITT.....	Music and Drawing
MARGARET DEMING	Librarian and Sewing Teacher
LEITITIA SYER	Cooking Teacher
J. WILLARD RUMMEL.....	Band Instructor

Governesses.

MISS KATE FRIEL	No. 1
MRS. LOUEAS WITT	No. 2
MISS LAURA McCONNELL.....	No. 3
MRS. FLORA G. WITT.....	No. 4
MISS OLIVE BUCHANAN	No. 5
MRS. E. R. SMOCK.....	No. 6
MISS EVA CARSON	No. 7
MISS HANNAH TEXTON	No. 8
MISS BERTHA LANGSTON	No. 9
MISS N. P. LITTEN.....	No. 10
MISS OLLIE CHANDLER	No. 11
MISS LOLA NEWBERRY	No. 12
MISS LIZZIE HARTWELL	No. 14
MISS LUCY BROADBENT	No. 15
MISS ELLA HARRISON	No. 16
MISS STELLA REED	No. 17
MISS SADIE WEIR	No. 18
MISS MARIE RIEDER	No. 19

Heads of Departments and Instructors in Industrial Work.

MRS. DELLA REED	Hospital Matron
MRS. C. W. BARRETT.....	Dining-room Matron
JAMES H. ROUNDS.....	Printing
CHARLES V. FORT.....	Carpenter
WM. CASELEY	Engineer
JACOB ROUTSON	Painting and Paper-hanging
CHRISTIAN THORSEN	Florist
MISS ADELAIDE M. CORY.....	Bookkeeper
GEORGE DILL	Storekeeper
WM. PERKEY	Baker
D. F. COPPER.....	Shoemaker
J. H. KOCHMAN.....	Tailor
ICEPHINE HUDLESON	Sewing
MRS. MATTIE E. PERKEY.....	Laundry
CHARLES WHISLER	Farm and Dairy
FRANK C. PAINTER.....	Gardner

REPORT OF BOARD OF TRUSTEES.

KNIGHTSTOWN, IND., Sept. 30, 1907.

TO HIS EXCELLENCY, J. FRANK HANLY, *Governor of the State of Indiana*:

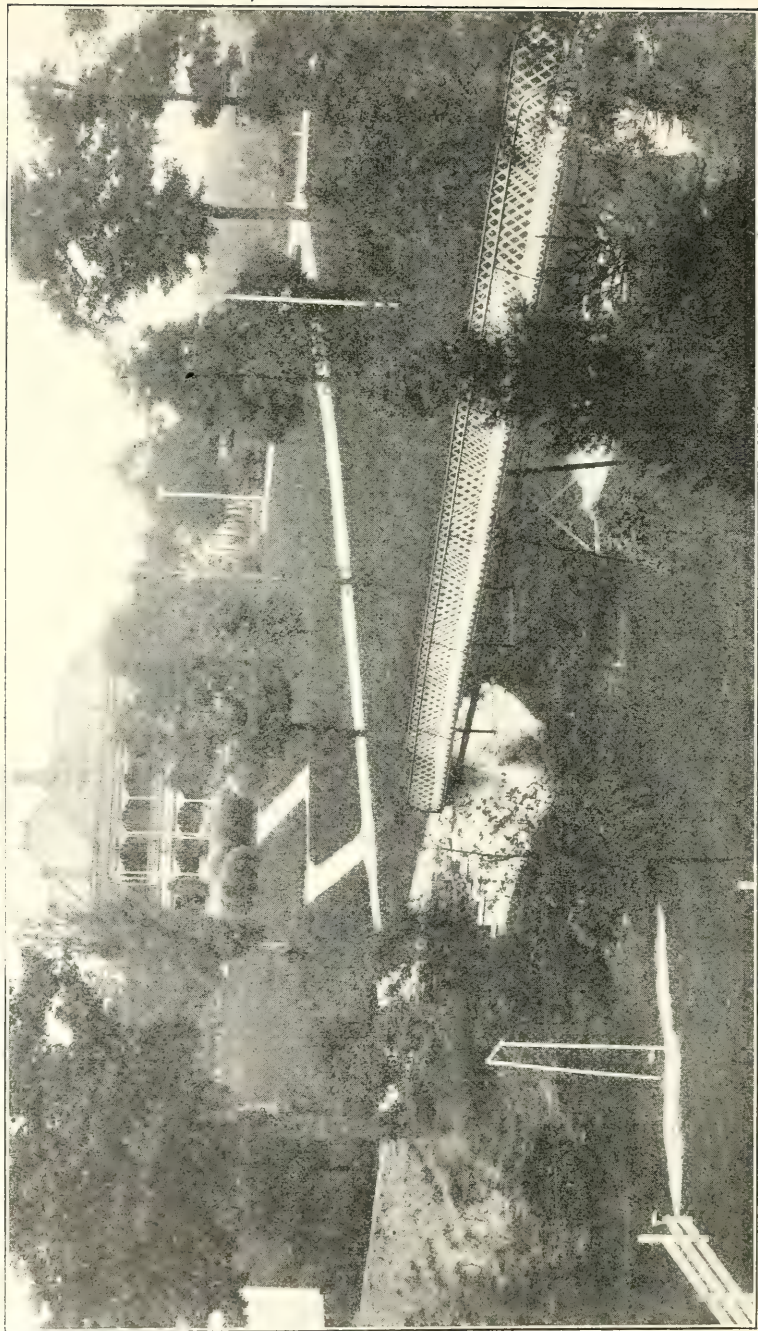
We, the Trustees of the Indiana Soldiers' and Sailors' Orphans' Home, submit our annual report to you for the fiscal year ending September 30, 1907.

The Institution has been conducted much in the same manner as shown in reports of late former years. Slight changes in methods of accomplishing work, where such changes would be an improvement, have been made. The education and preparation of the child for self-support and intelligent citizenship are the governing thought in all that is done for our children. There has been no change in the officers, and but few changes of employees. We congratulate ourselves, and have every reason to be thankful for a good year's work.

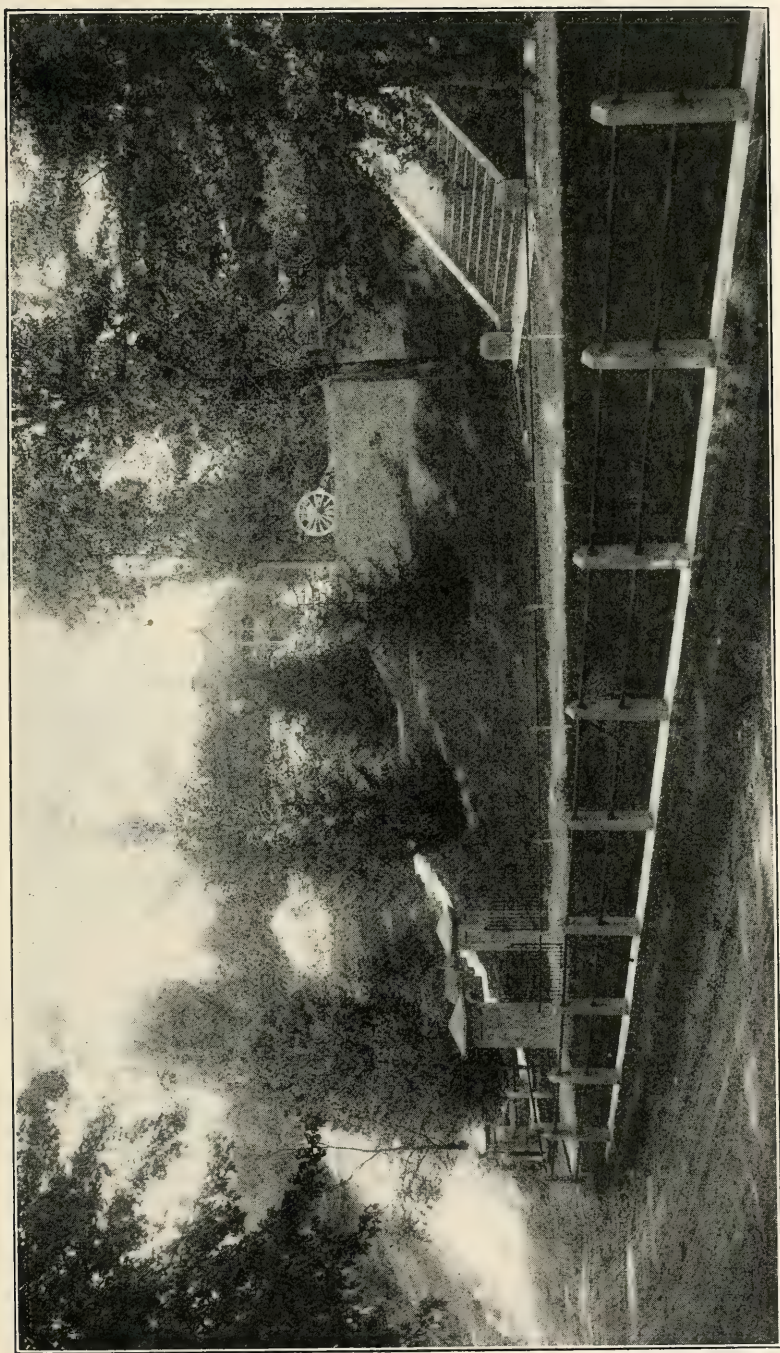
Nothing has marred or retarded our progress, and a review gives us a measure of satisfaction with all that has been accomplished. We enter upon our new year with renewed energy and inspiration.

The term of office of one of our members, Mrs. Julia S. Conklin, having expired, her place was filled by the appointment of Mrs. Laura A. Cumback, of Greensburg, Ind., and under the new provision of the law, Luther Short, of Franklin, Ind., has been added to our number. On the 27th day of September, 1907, being our first meeting after the appointments, we organized the Board by electing Geo. W. Duncan, President; Luther Short, Vice-President; Laura A. Cumback, Secretary, and Hugh Dougherty, Treasurer, who now constitute the members of the Board of Trustees of said Institution.

Buildings are kept in good repair and are insured up to the limit of the appropriation for that purpose. We refrain



HOSPITAL, LOOKING NORTH.



PUBLIC ROADWAY IN FRONT OF HOME GROUNDS.

from going into further detail of the work of the different departments. The reports of the Superintendent and Treasurer present details and finances of the Institution. These reports are attached hereto and made a part hereof.

According to legislative appropriation, we have in process of erection three new boilers, each 232 horsepower, set battery and singly. The battery we hope to have ready for use by the 15th of November next. We are under obligations to Mr. Shutts, engineer at the State House, for valuable suggestions in selecting boilers suitable for this place. We selected the Sterling boiler, price \$7,600, placed upon our foundation, ready for brick work. The balance, \$2,202.50, for brick work, we fear, may not be sufficient to fully equip the three boilers for final use, owing to the increased price of material and labor. But when they are completed they will furnish all the power needed by the Home for years to come.

Respectfully submitted,

GEO. W. DUNCAN, President.

LUTHER SHORT, Vice-President.

LAURA A. CUMBACK, Secretary.

HUGH DOUGHERTY, Treasurer.

TREASURER'S REPORT

FOR FISCAL YEAR ENDING SEPTEMBER 30, 1907.

Maintenance Fund.

Annual appropriation		\$100,000 00
1906.		
Nov. Warrant No. 81,928.....	\$10,129 18	
Dec. Warrant No. 82,288.....	9,341 33	
1907.		
Jan. Warrant No. 83,650.....	8,131 00	
Feb. Warrant No. 84,802.....	7,980 13	
Mar. Warrant No. 85,563.....	9,116 98	
Apr. Warrant No. 86,214.....	9,390 69	
May. Warrant No. 86,699.....	9,101 56	
June. Warrant No. 87,321.....	9,663 50	
July. Warrant No. 88,005.....	5,871 02	
Aug. Warrant No. 88,263.....	7,369 49	
Sept. Warrant No. 88,722.....	5,565 05	
		<hr/>
	\$91,659 93	
One-twelfth returned	8,333 33	
Balance unused	6 74	
		<hr/>
Total		\$100,000 00

Repair Fund.

Annual appropriation		\$5,000 00
1906.		
Nov. Warrant No. 81,929.....	\$633 81	
Dec. Warrant No. 82,289.....	531 50	
1907.		
Jan. Warrant No. 83,651.....	858 73	
Feb. Warrant No. 84,803.....	589 59	
Mar. Warrant No. 85,564.....	443 56	
Apr. Warrant No. 86,215.....	91 27	
May. Warrant No. 86,700.....	506 89	
June Warrant No. 87,322.....	281 85	
July Warrant No. 88,006.....	176 62	
Aug. Warrant No. 88,265.....	148 36	
Sept. Warrant No. 88,723.....	319 72	
		<hr/>
	\$4,581 90	
One-twelfth returned.....	416 67	
Balance unused	1 43	
		<hr/>
Total		\$5,000 00

Library Fund.

Annual appropriation		\$300 00
1906.		
Nov. Warrant No. 81,930.....	\$91 02	
Dec. Warrant No. 82,290.....	33 94	
1907.		
May. Warrant No. 86,702.....	30 06	
June. Warrant No. 87,323.....	18 80	
Sept. Warrant No. 88,724.....	101 18	
	<hr/>	
	\$275 00	
One-twelfth returned	25 00	
	<hr/>	
Total		\$300 00

Agent's Fund.

Annual appropriation		\$1,000 00
1906.		
Nov. Warrant No. 81,931.....	\$54 25	
Dec. Warrant No. 82,291.....	51 10	
1907.		
Jan. Warrant No. 83,652.....	62 36	
Feb. Warrant No. 84,804.....	69 20	
Mar. Warrant No. 85,565.....	67 90	
Apr. Warrant No. 86,216.....	63 60	
May. Warrant No. 86,701.....	74 80	
June Warrant No. 87,324.....	57 85	
July. Warrant No. 88,007.....	71 39	
Aug. Warrant No. 88,264.....	71 49	
Sept. Warrant No. 88,725.....	110 14	
	<hr/>	
	\$754 08	
One-twelfth returned	83 33	
Balance unused.....	162 59	
	<hr/>	
Total		\$1,000 00

Insurance Fund.

Annual appropriation		\$700 00
1907.		
Jan. Warrant No. 83,653.....	\$265 30	
Feb. Warrant No. 84,805.....	63 73	
Apr. Warrant No. 86,217.....	75 03	
May. Warrant No. 86,703.....	94 23	
June. Warrant No. 87,325.....	40 52	
Aug. Warrant No. 88,266.....	81 93	
	<hr/>	
	\$620 74	
One-twelfth returned	58 33	
Balance unused	20 93	
	<hr/>	
Total		\$700 00

Paid to the State Treasurer for Earnings.

1906.

Nov. Quietus No. 11,889.....	\$57 71
Dec. Quietus No. 12,063.....	43 02

1907.

Jan. Quietus No. 12,122.....	86 50
Feb. Quietus No. 12,149.....	48 13
Mar. Quietus No. 12,175.....	46 00
Apr. Quietus No. 12,321.....	71 50
May. Quietus No. 12,379.....	41 43
June. Quietus No. 12,531.....	118 17
July. Quietus No. 12,675.....	28 15
Aug. Quietus No. 12,779.....	53 72
Sept. Quietus No. 12,905.....	31 83

Total	\$626 16
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Respectfully submitted,

HUGH DOUGHERTY,
Treasurer.

SUPERINTENDENT'S REPORT.

To the Honorable Board of Trustees:

I respectfully submit herewith the twenty-ninth annual report of the Indiana Soldiers' and Sailors' Orphans' Home for the fiscal year ending September 30, 1907. It will be remembered that the last Legislature changed the fiscal year so that it now ends on September 30th instead of October 31st, as formerly, which makes this year of only eleven months' duration. Compared with other years, both in efficiency of work done and good accomplished for those intrusted to our care, we hope we do not err in saying that the comparison is not unfavorable. The means and methods of doing things improve from year to year, and earnestness of effort increases with them. From the very nature of the subject-matter reported from year to year, sameness is unavoidable; striking differences in these reports are not possible.

In the subjoined table herewith presented, the changes in our population may be noted for the last ten years:

YEARS.	En-rolled.	Ad-mitted.	Dis-charged, Age Limit.	Dis-charged, Re-quest of Friends.	Dis-charged, for Absence.	Dis-charged, by In-denture.	Sent to Re-formatory.	Deaths.	Remain-ing Sept. 30.	Av. Daily Atten-dance for Year.
1898.....	639	135	74	43	10	7	1	2	638	573
1899.....	638	120	74	28	9	4	2	3	639	583
1900.....	639	115	75	21	5	5	.....	5	641	593
1901.....	641	87	61	29	2	6	.....	.....	630	581
1902.....	630	106	84	32	4	12	.....	2	602	563
1903.....	602	90	70	32	.....	16	.....	2	572	527
1904.....	572	73	45	11	.....	8	.....	4	577	514
1905.....	577	62	70	24	3	6	.....	4	532	491
1906.....	532	74	67	13	5	8	.....	3	510	456
1907.....	510	40	54	15	4	2	.....	2	473	444

Health.

The year just closed has been marked by good health. The only epidemic which prevailed for a short period was that of mumps. No serious results. But two deaths occurred

during the year. You are referred to the report of Dr. O. E. Holloway, our physician, found on another page, for health conditions of the Home during the year.

Educational.

The mental and moral awakening given to a child is infinitely the greatest charity he can receive. Effort in his behalf in this direction increases his chances for success through life, as well as adding to his worth as an individual and citizen. The schools of the Home attempt to emphasize the idea of his education in every act he performs. If he can gather any skill of hand, or develop a mental faculty, or be awakened from indifference or unbelief in himself, a great work has been done for him. Looking constantly toward his preparation at the earliest possible moment for self-support, by entering some home or field of labor, the practical side of his training is kept prominently in view. The work of the past year in the schools was under the direction of Mrs. Laura A. Cumback, whose education and experience in these schools are well known. She was assisted by a faithful and earnest corps of teachers, and, together, they "wrought a good work" upon these children.

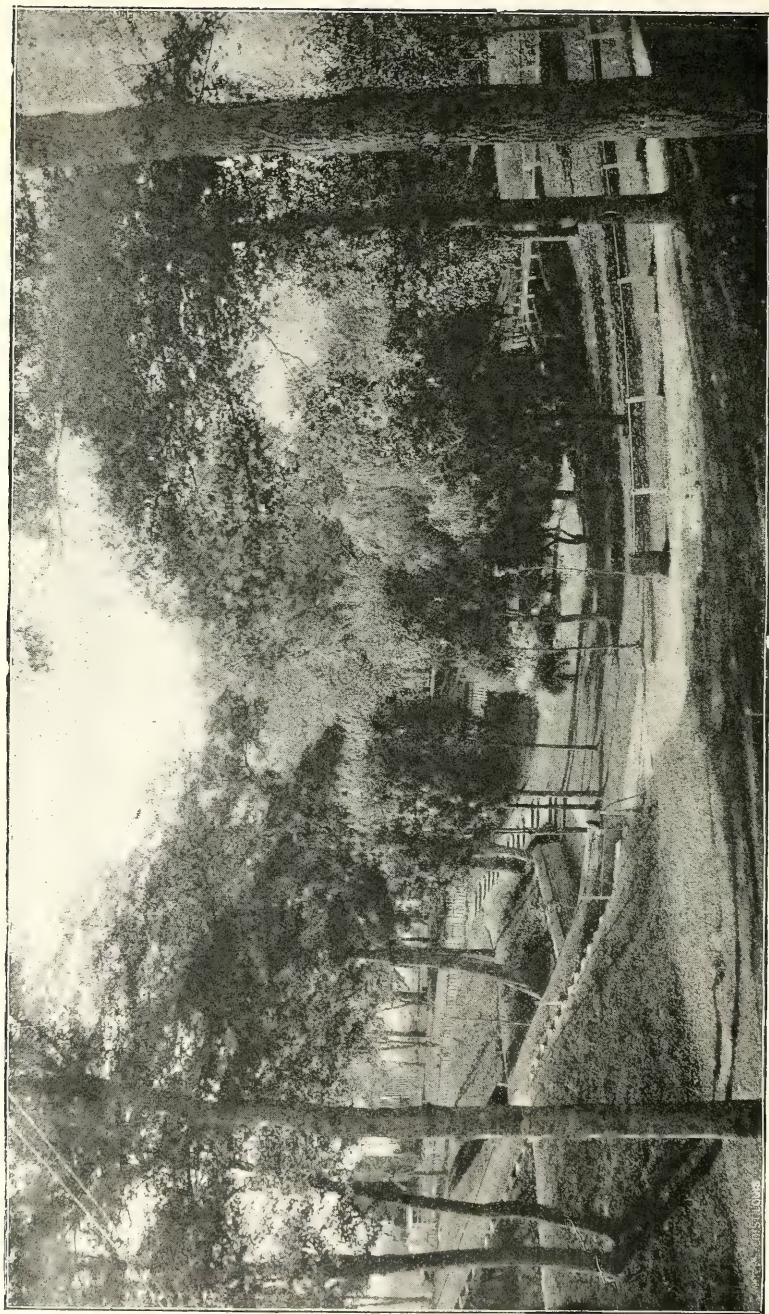
I can do no better than to give in this connection a brief report of the schools covering the period of the past term, written by Frances L. Banta, now Principal, but last year substitute teacher in the eighth grade. Her report gives a correct outline of the school work in all departments, and embraces the course of study.

Report of Schools.

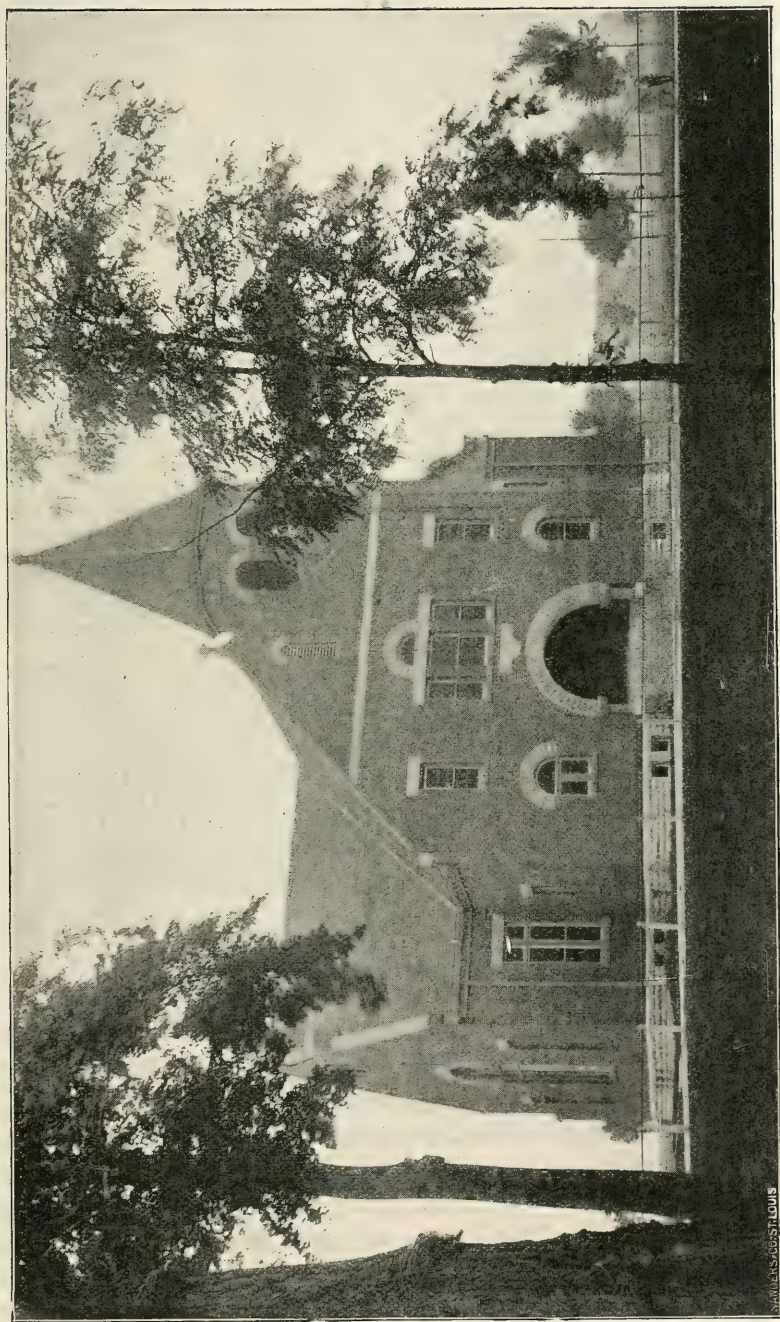
Prof. A. H. Graham, Superintendent:

Thorough and systematic work, that will compare favorably with that done in any elementary school in the State, is the constant aim of the Institution. The immediate application the pupil must make of all his attainments, upon leaving the Home, necessitates keeping in view the most practical side of education.

The Home school is divided into a Kindergarten and nine



SPRING VALLEY.



LINCOLN HALL.

grades, the gradation of which corresponds to the public schools of the State. With a few minor changes, to meet the demands of our school, the Indiana Course of Study is used. The ninth grade work includes a review in arithmetic, algebra, civil government, rhetoric, physical geography and literature.

The Indiana series of school books is used. This avoids any confusion when our pupils are transferred to other schools or when new pupils enter this school.

The special work includes music, drawing, stenography, cooking and sewing.

The music, including vocal and instrumental, was under the direction of special teachers, assisted by two graduates of the school. Each grade received two vocal lessons per week, supplemented with practice work by the grade teachers. "The Educational Music Course" was used as a textbook. A chorus of forty voices, a quartet of boys and a trio of girls furnished music for chapel services and public entertainments.

A piano class of eighteen girls received instruction. The course included scales for the development of technic and the study of compositions from the best composers. The piano recital given during the year was highly creditable.

The Home Band, which consists of thirty-five members, received daily instruction. Two general rehearsals were given each week. The band gave weekly concerts during the summer months and furnished music for many public occasions. The band filled engagements at the National Encampment of the G. A. R. at Minneapolis, Minn., and at the State Encampment at Fort Wayne, and various other places over the State. The music rendered by the band is of high standard and always meets with the most hearty approval. The band is ready to respond to any demands made upon it for entertainment.

One lesson per week was given in drawing. The Prang system is used. The course of instruction included the use of the pencil, pen, brush and ink, charcoal and water colors.

In shorthand and typewriting, a class of nine pupils, com-

posed of boys and girls from the eighth and ninth grades, received instruction. The books used were "The Phonographic Amanuensis" and "Reporter's Companion." The touch method of typewriting was taught, and the machines used were the Remington and Smith-Premier.

One year's course in domestic economy, including practical and theoretical work, was given to a class of sixteen girls. The foods were classified and studied with regard to their composition, cooking, digestion and nutritive value. The text book used was "Elements of Theory and Practice of Cooking."

The practical work includes the cooking of cereals, vegetables, meats, poultry, fish, breads, rolls, pastry, desserts, the making of ices, beverages, and table serving.

The constant endeavor is to direct to an intelligent and practical understanding of this work in a home. A certificate is given to each girl who completes satisfactorily the year's work. The exhibit given at the close of school reflected much credit upon teacher and pupils.

Weekly instruction in sewing was given to ninety-five girls under thirteen years of age. Lessons were given in basting, overhanding, overcasting, hemming, gathering, darning, patching, hemstitching, fancy stitching, matching stripes, making French seams, felled seams, buttonholes, loops, eyelets, and sewing on buttons, hooks, eyes and tapes. A book of sample work was made by each pupil. These books, with a hundred and fifty pieces of useful as well as fancy work, made a beautiful exhibit in June.

Commencement consisted of the following:

Class address by Rev. Robert H. Dunaway.

Musical.

Planting a class ivy.

School entertainment.

Alumni business meeting.

Graduating exercises.

Senior play.

Base ball game.

Cooking school exhibit.

Band concert.

Alumni reception.

A class of twenty-five pupils graduated June 20, 1907. Following is a list of the graduates and their themes:

Daisy Dean Whiteford—"Songs of Long Ago."
 Anna Belle Dudley—"The American Woman."
 Blanche Horner—"Morning in Poetry."
 Zola Elaine Stewart—"How the Nations Travel."
 Georgia Fleming—"The Library Movement."
 Helen Cain—"Juvenile Literature."
 Margaret Howard—"Class Prophecy."
 Mabel Claire Morris—"The Great Man of Today—Roosevelt."
 Marie Louise Sanders—"A Few Lessons of Life."
 Mai McMullin—"Short Story—"The Wizard's Gold."
 George Howard Foster—"Features and Characters."
 Orton Thomas Hoover—"Money Kings of America."
 Arthur Raymond Cavender—"Peace."
 William T. Ross—"The Coming Man."
 Norman Chandler—"The Practical Uses of Electricity."
 Edward J. Lane—"Planting Response."
 James Earl Case—"The Press."
 Robert Welborn Robertson—"Child Labor."
 Harry Shafer—"Resources of the Northwest."
 Oliver Earl Smith—"The American Boy's Attitude Toward Hard Work."
 Brooks Howard—"The Race Question."
 Charles Miller—"Music."
 Orman Harrison Ray—"Are We Becoming Better or Worse?"
 Francis Russell Horn—"Practical Education Plus Opportunity."
 Albert Jack—"Good Citizenship and What It Means."

In behalf of the G. A. R. of Indiana, Col. William Ketchem, of Indianapolis, presented the graduates with a badge, and the Board of Trustees presented Bibles and diplomas.

The following holidays were observed: Thanksgiving, Christmas, Washington's Birthday, Easter and Memorial Day.

The efficient work done in the schools in the past year is due to the conscientious and untiring efforts of Mrs. Laura A. Cumback and the able corps of teachers.

The fall term of school began September 3, 1907, with an enrollment of 455 pupils and sixteen teachers in charge.

Respectfully submitted,

FRANCES L. BANTA.

Industrial.

The following departments are maintained for the instruction of the children in the various pursuits of life: Farming, gardening, floriculture (including care of lawn and greenhouse), printing, shorthand and typewriting, carpentering, engineering, painting and paperhanging, tailoring, sewing, baking, laundering and cooking. Pupils enter upon these various trades when they reach their thirteenth year, after which they attend school but half of each day. The greatest care is given by the foremen of these departments in teaching their pupils the details of the work. The most encouraging results are obtained, not only in the work performed but in developing a pride in labor itself. The following table gives the number of children in the various trades during the past year:

	<i>Boys.</i>	<i>Girls.</i>
Farm and dairy	19	..
Garden	6	..
Floriculture	15	..
Engineering	12	..
Printing	38	..
Carpentering	19	..
Painting and paperhanging.....	9	..
Tailoring .....	..	6
Sewing class .....	..	39
Laundering	6	12
Cooking	2	24
Shorthand and typewriting.....	5	9
Juvenile sewing class.....	..	81
Library work .....	..	2

Home Library.

One of the greatest adjuncts in educational work is a library of well-selected books. By a wise use of books the child is entertained, inspired and instructed. The reading habit is developed. The selection of books for an institution is an important work. The character and needs of the readers must be studied, and then the reading should have intelligent direction. Our library contains about 4,000 volumes, and has grown slowly from year to year by an annual appropriation of \$300. The books purchased embrace the best available standard works on biography, history,

fiction and travel, with a good supply of reference books. All are catalogued according to Dewey's system of classification, and are loaned for a period of two weeks. When books are too badly worn for the shelves, and are beyond repair, they are given out to the divisions for a final reading.

Placing in Homes.

All children discharged from the Home are discharged by indenture or at age limit, but in either case the home to which they are to go is visited by the Agent, who makes careful investigation as to the home and its surroundings and as to the morals of the community, the opportunity it offers the child for religious and educational growth. Children are not sent to relatives or former friends if vicious surroundings exist, but places are sought that are as helpful to them in every way as can be found. Our Agent visits these homes from time to time for the purpose of learning the welfare of the children, and ascertaining the feeling of the people or employers toward the children, and if they are mutually pleased. If it is learned that a serious mistake has been made in the placement of a child, and that no probability exists of harmonizing the parties, the child is returned and another place sought for it. During the year seventy-seven children have been discharged and placed in homes or places of employment, and they are now doing very well. This duty of finding homes where the best interests of the child shall be subserved is a grave responsibility. That both the child and the people with whom it is to live may prove helpful to each other requires knowledge of human nature possessed by few indeed.

Our Visitors.

It is gratifying to mention that public interest has been shown in the welfare of the Home by frequent visits of the Board of State Charities, the respective committees of the G. A. R., W. R. C., Sons of Veterans, Ladies' Aid Society and Ladies of the G. A. R. These have left us assurance of a sincere and patriotic sentiment throughout the State, favorable to the school.

Improvements.

Slight repairs have been made, as needed, that the property might not suffer from neglect. The last Legislature was very liberal toward the Home, making the following specific appropriations for improvements: New boilers, \$8,902.50; addition to coal house, \$3,200; fencing, \$682.40. These additions will be completed as early as possible and will contribute largely to the safety, convenience and efficiency of the Institution.

Religious Training.

Opportunity is afforded to all in the services on each Sunday. The regular services are held, Sunday school at 10 a. m., afternoon address at 2 p. m., and Christian Endeavor Societies, 6 to 8 p. m. The three Endeavor Societies, Senior, Intermediate and Junior, afford opportunity for each child who so wishes to take an active part in the meetings, and thus give excellent training in appearing before audiences; at the same time that they develop the religious ideals.

Conclusion.

In addition to the quarterly statements made to the Board of State Charities, monthly statements giving details of work in all departments have been submitted to you, and it is hardly necessary to burden this report with further details.

In conclusion, I desire to make acknowledgments to your honorable Board of uniform courtesy and timely advice in all matters pertaining to the management of affairs intended to promote the best interests of the Home. To employes, one and all, I offer my thanks for earnest, intelligent and faithful service in duties belonging to them. I would express my appreciation of the children also, who, with few exceptions, have shown their gratitude to the State that furnishes them opportunity, by their effort, to learn, and their obedience to rules of good order.

Respectfully submitted,

A. H. GRAHAM,
Superintendent.

STATISTICAL SUMMARY FOR THE YEAR 1907.

	Population.	<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Number of inmates present at beginning of fiscal year	297	213		510
Number received during the year.....	20	20		40
Number discharged or died during the year.....	52	25		77
Number at end of the fiscal year.....	265	208		473
*Daily average attendance (i. e., number of inmates actually present) during the year.....	251	193		444
Average number of officers and employes during the year	26	62		88

	Expenditures.	
Current expenses—		
1. Salaries and wages.....	\$31,579 75	
2. Clothing	7,516 90	
3. Subsistence	25,473 37	
4. Ordinary repairs	4,581 90	
5. Office, domestic and outdoor expenses.....	28,739 73	
Total		\$97,891 65
Extraordinary expenses—		
1. New buildings, land, etc.....		
2. Permanent improvements to existing buildings		
Total		
Grand total		\$97,891 65

A. H. GRAHAM,
Superintendent.

*Our daily average attendance is reduced on account of absence during the summer vacation.

REPORT OF THE FINANCIAL OFFICER.

To the Honorable Board of Trustees of the Indiana Soldiers' and Sailors' Orphans' Home:

I have the honor to submit the following report of receipts and disbursements for the fiscal year ending September 30, 1907. Also roster of employes connected with the institution during said year, kind of service rendered and amount paid each.

H. H. WOODS,
Financial Officer.

MONTHLY EXPENDITURES FOR MAINTENANCE.

November.

1906.		
For Support	\$2,812	14
Furnishing	265	68
Clothing	1,109	29
Fuel and light.....	1,195	33
Farm	139	81
Garden	40	50
Greenhouse	44	25
School	90	30
Office expenses	55	85
Laundry	250	50
Hospital	72	80
Transportation	955	23
Printing office	143	00
Discharge fund	15	00
Employes	2,614	50
Officers' salaries	325	00
	\$10,129	18

December.

1906.		
For Support	\$3,015	53
Furnishing	152	18
Clothing	374	47
Fuel and light.....	1,342	17
Farm	96	61
Garden	1	20
Greenhouse	103	80
School	298	26

December—Continued.

For Office expense	\$21.40
Laundry	51 56
Hospital	59 65
Transportation	776 32
Printing office	49 78
Engineer's supplies	45 40
Employees	2,628 00
Officers' salaries	325 00
	<hr/>
	\$9,341 33

January.

1907.

For Support	\$2,168 47
Furnishing	297 39
Clothing	549 44
Fuel and light.....	938 10
Farm	117 35
Greenhouse	21 27
School	46 40
Office expenses	34 10
Laundry	91 65
Hospital	29 15
Transportation	814 24
Printing office	15 84
Contingent	66 60
Discharge fund	15 00
Employees	2,601 00
Officers' salaries	325 00
	<hr/>
	\$8,131 00

February.

1907.

For Support	\$2,268 27
Furnishing	82 95
Clothing	164 70
Fuel and light.....	1,255 31
Farm	80 40
Garden	37 65
Greenhouse	28 45
School	97 11
Office expenses	61 35
Hospital	95 84
Transportation	778 47
Printing office	6 22
Engineer's supplies	41 16
Discharge fund	45 00
Employees	2,612 25
Officers' salaries	325 00
	<hr/>
	\$7,980 13

March.

1907.	
For Support	\$2,716 60
Furnishing	269 67
Clothing	495 63
Fuel and light.....	1,582 20
Farm	131 85
Greenhouse	31 73
School	90 71
Office expenses	9 55
Laundry	30 62
Hospital	102 70
Transportation	497 89
Printing office	70 84
Engineer's supplies	78 99
Contingent	2 00
Discharge outfit	23 80
Discharge fund	45 00
Employes	2,612 00
Officers' salaries	325 00
	<hr/>
	\$9,116 98

April.

1907.	
For Support	\$2,339 41
Furnishing	314 84
Clothing	556 01
Fuel and light.....	1,600 96
Farm	360 96
Garden	28 42
Greenhouse	77 35
School	73 70
Office expenses	37 65
Laundry	89 13
Hospital	62 67
Transportation	707 60
Printing office	52 11
Engineer's supplies	26 25
Industrial supplies	61 13
Discharge outfit	30 50
Discharge fund	30 00
Employes	2,617 00
Officers' salaries	325 00
	<hr/>
	\$9,390 69

May.

1907.	
For Support	\$2,741 64
Furnishing	407 51
Clothing	1,570 27
Fuel and light	278 57

May—Continued.

For Farm	\$162 63
Greenhouse	40 99
School	85 45
Office expenses	36 21
Laundry	151 23
Hospital	29 85
Transportation	146 10
Printing office	48 07
Engineer's supplies	20 25
Contingent	165 79
Discharge fund	390 00
Employees	2,627 00
Officers' salaries	200 00
	<hr/>
	\$9,101 56

June.

1907.

For Support	\$2,470 77
Furnishing	297 28
Clothing	672 56
Fuel and light	1,274 20
Farm	397 00
Garden	12 80
Greenhouse	74 00
School	81 51
Office expenses	49 35
Laundry	125 50
Hospital	68 85
Transportation	503 77
Printing office	17 51
Contingent	21 63
Discharge outfit	562 77
Discharge fund	60 00
Employees	2,624 00
Officers' salaries	350 00
	<hr/>
	\$9,663 50

July.

1907.

For Support	\$1,605 76
Furnishing	106 58
Clothing	173 08
Fuel and light	488 13
Farm	229 16
Garden	4 82
Greenhouse	109 00
Office expenses	237 37
Laundry	115 25
Hospital	73 67

July—Continued.

For Transportation	\$256 43
Printing office	12 15
Discharge outfit	77 10
Discharge fund	90 00
Employees	2,035 00
Officers' salaries	206 30
	<hr/>
	\$5,871 02

August.

1907.

For Support	\$2,571 90
Furnishing	395 23
Clothing	685 85
Fuel and light.....	409 02
Farm	246 89
Garden	3 60
Greenhouse	110 16
School	44 00
Office expenses	68 60
Laundry	80 00
Hospital	44 22
Transportation	217 97
Engineer's supplies	27 05
Discharge outfit	42 95
Discharge fund	180 00
Employees	2,042 00
Officers' salaries	200 00
	<hr/>
	\$7,369 49

September.

1907.

For Support	\$1,397 69
Furnishing	3 60
Fuel and light.....	373 50
Farm	137 94
Garden	26 95
Greenhouse	35 00
School	16 45
Office expenses	26 00
Laundry	28 15
Hospital	57 05
Transportation	242 57
Discharge outfit	108 15
Discharge fund	45 00
Employees	2,642 00
Officers' salaries	425 00
	<hr/>
	\$5,565 05

Disbursements during the months, as shown by vouchers on file with the Auditor of State, and numbered from 1 to 813, inclusive:

1906.	
November	\$10,129 18
December	9,341 33
1907.	
January	8,131 00
February	7,980 13
March	9,116 98
April	9,390 69
May	9,101 56
June	9,663 50
July	5,871 02
August	7,369 49
September	5,565 05
<hr/>	
\$91,659 93	

Recapitulation.

For Support	\$26,108 23
Furnishing	2,592 91
Clothing	6,351 30
Fuel and light	10,737 69
Farm	2,100 60
Garden	155 94
Green house	676 00
School	923 89
Office expenses	637 43
Laundry	1,013 59
Hospital	696 45
Transportation	5,896 59
Printing office	415 52
Engineer's supplies	290 24
Industrial supplies	61 13
Contingent	256 02
Discharge outfit	845 35
Discharge fund	915 00
Employees	27,654 75
Officers' salaries	3,331 30
<hr/>	
\$91,659 93	

Summary.

Received from treasurer of board.....	\$91,659 93
Disbursements	91,659 93

Respectfully submitted,

H. H. WOODS,
Financial Officer.

PHYSICIAN'S REPORT.

To the Superintendent and Board of Trustees of the Indiana Soldiers' and Sailors' Orphans' Home:

I am pleased to report that the past year has been one of exceptional good health with the inmates of the Home.

We have fortunately escaped any of the contagious or infectious diseases. This is due, in a great measure, I am sure, to the strict and immediate quarantine against any infected locality in the State. It is our invariable rule to allow no child or employe to visit their homes, either for vacation or other causes, when the State Board of Health has reported any contagious diseases in that particular locality; neither are children received from such infected localities without first passing through the quarantine hospital. Usually upon the return of the children from their summer vacation we have a few cases of fever, either typhoid or malarial, the result of exposure while at their homes. This year we have escaped even this.

We have continued the plan of caring for the very young and delicate children in the hospital building. We are thus enabled to give them better care as to diet, and their general health, and allow them greater liberties, regarding their coming and going, than they could possibly enjoy under the rules and regulations necessary in the division rooms.

The following is the mortality record of the past year, with date and cause of death:

Mina Philips, age 9 years; meningitis; January 8, 1907.

Grace St. John, age 15 years; tuberculosis; January 20, 1907.

To the officers, nurses, and governesses of the Home, I am under many obligations for aid and assistance extended to me.

Respectfully submitted,

O. E. HOLLOWAY,

Physician.

GENERAL INFORMATION.

How to Secure the Admission of Children to the Home.

When it is desirous to secure the admission of a child to the Indiana Soldiers' and Sailors' Orphans' Home, blank application papers may be obtained for the purpose by addressing the Superintendent.

These are to be filled out in accordance with the instructions given and to be returned to the Superintendent. At the meeting of the Board of Trustees next after applications are received, they will be submitted for approval or rejection. In either event, official notice will be given by the Superintendent as to the action of the Board of Trustees, and if the action thereupon has been favorable, the date will be fixed on which the child may be brought to the Home.

No fund has been provided for defraying the railroad expenses of children that have been admitted to the Home. If friends have not the means aid can generally be obtained from the township trustee or the county commissioners.

A family relative is allowed to visit the children once every six months, and to remain twenty-four hours on each visit.

Children may be taken away during vacation, but the Home can not bear any part of the transportation expenses, and they must be returned in due time to enter school at the opening of the session.

Whenever parents desire to take permanent custody of their children, application for discharge, in writing, should be made through the Superintendent to the Board of Trustees.

Laws Governing the Admission of Children.

Section 9. The Trustees and (under regulations and a form of application which they shall prescribe) the Superintendent are authorized and required to receive, as pupils of the Indiana Soldiers' and Sailors' Orphans' Home, orphans and children residing in this State, under the age of

sixteen years who may be destitute of the means of support and education, in the following order:

First. Orphans, children of such deceased Union soldiers or sailors in the army or navy of the United States in the late civil war, or in the war with Spain, or in the war in the Philippine Islands, said orphans not having mothers living. If there be not applications for the admission of persons of this class sufficient to fill the Home, then there shall be in like manner admitted:

Second. Orphans, children of such deceased soldiers and sailors, said orphans having mothers living. If there be not applications for the admission of persons of said two classes sufficient to fill said Home, then, in like manner, there shall be admitted:

Third. Children of permanently disabled or indigent soldiers or sailors of said service, residing in this State, or in National Military Homes, having been admitted thereto from this State.

All children admitted to said Home, as pupils thereof, shall be supported and educated therein until they shall be sixteen years of age, unless, for good cause, sooner discharged. Any of said pupils who, by reasons of physical disability or any other cause, may be, in the judgment of said Board, unable to earn a livelihood, shall be retained as pupils of said Home, until they shall be eighteen years of age.

Section 10. Each county in this State shall be entitled to have in said Home a number of pupils proportionate to the number of soldiers furnished by it to the Union service in said war, which proportionate number shall be fixed by said Board according to the capacity of said Home. Applicants from a county already having its full quota in said Home shall be admitted, if the Home shall not be filled at the time of making application; but in the admission of applicants, when all applying can not be accommodated, preference shall be given to those from counties not having in the Home as many pupils in proportion to their quotas, as fixed by said board, as other counties from which applications may be pending shall have therein.

RULES GOVERNING THE HOME.

For the information of the public, and those personally interested, the rules governing the Home are inserted:

1. All employes are under the supervision of the Superintendent, and must give implicit obedience to his orders.

2. In the absence of the Superintendent, the Financial Officer will be in full charge, and obedience to his orders is required.

3. The Superintendent is responsible for the proper use, care and disposition of the property belonging to the Home, and for the due administration of its affairs, but the hearty co-operation of all officers and employes is expected, and a ready and cheerful compliance with all orders and regulations is required.

4. No one will be knowingly employed or continued in service who does not possess the necessary qualifications or fitness for the particular duties to be performed.

5. Cordiality of feeling among the employes is the basis of co-operation, hence no one will be continued in service who can not heartily unite with all for the good of all.

6. Any fact prejudicial to the moral character or standing of any officer or employe coming to the knowledge of another should at once be communicated to the Superintendent, but espionage, tattling and talebearing are forbidden.

7. Governesses, teachers and heads of departments must acquaint all under their charge with the rules and regulations of the Institution, and will be held accountable for the efficient and faithful performance of the duty that devolves upon them respectively.

8. No case of discipline must be referred to the Superintendent, unless beyond the control of the governess. Corporal punishment may be administered when other remedies have failed, but excessive punishment is not to be inflicted at any time. Children deprived of their play hours as a penalty shall be entitled to the liberties of the other children on all intervening holidays and Sundays.

9. It shall be the duty of every officer and employe to report to the governess of the child any misdemeanor or irregularity of conduct coming to their knowledge, and such information must be received and given in a spirit of kindness, and with a view to the best interests of the Institution.

10. Under no circumstances will an employe be allowed to apply to the children any language or epithet calculated to irritate, humiliate or degrade them. No rough expressions or slang phrases must be employed; but, on the other hand, a correct and discreet use of the language in the presence of the children must be observed.

11. The head of each department shall see that the industry conducted by him is taught and practiced in a thorough and comprehensive manner, so that each pupil shall obtain, as far as possible, a practical knowledge of the same in all its parts. He shall be at his post of duty at

the beginning of business hours, preserve good order among his pupils, and secure close and constant application to the work in which they are engaged.

12. Smoking upon the grounds or in the presence of the children is strictly forbidden.

13. Employees are expected to attend Sunday services. Habitual neglect of this duty will be regarded as a lack of proper interest in the religious training of the children under their care.

14. Leave of absence will be granted by the Superintendent, or the Financial Officer when the Superintendent is not present.

15. In urgent cases relief from duty will be granted.

16. In cases of severe illness, or death of relatives or friends, a reasonable leave of absence will be granted.

17. In case of absence on the part of an employe, a substitute satisfactory to the Superintendent must be provided.

Hours.

18. All persons residing in the Institution are expected to be in their rooms by 10 p. m., at which hour the building will ordinarily be closed.

19. Lights in private rooms, dormitories and division rooms must be extinguished at 10 p. m., except by special permission.

20. Ladies may receive gentlemen in the public parlor, which will be open to the public use until 10 p. m. Except in the case of relatives, ladies will not entertain gentlemen in their private rooms or division rooms. When ladies are apprised of the coming of gentlemen, the Superintendent or Matron must be informed and consent obtained.

21. Wilful violation of the foregoing rules will subject the offender to a forfeiture of position.

Visitors.

22. Are heartily welcome, and all employes are required to show every possible courtesy to all persons who may wish to pass through the various buildings and about the grounds of the Institution.

23. Visitors are not allowed to go through the buildings without an attendant.

24. The buildings will be open to visitors every day in the week except Sunday.

COUNTY REPRESENTATION, SEPTEMBER 30, 1907.

Adams	1	Marion	42
Allen	14	Madison	23
Bartholomew	5	Marshall	12
Benton	2	Martin	2
Blackford	6	Miami	4
Boone	4	Montgomery	4
Brown	3	Monroe	13
Carroll	2	Morgan	4
Cass	4	Newton	0
Clark	16	Noble	0
Clay	3	Ohio	0
Clinton	10	Orange	5
Crawford	0	Owen	3
Daviess	4	Parke	4
Dearborn	7	Perry	2
Decatur	8	Pike	4
Dekalb	2	Porter	0
Delaware	7	Posey	2
Dubois	1	Pulaski	2
Elkhart	7	Putnam	8
Fayette	1	Randolph	4
Floyd	1	Ripley	1
Fountain	5	Rush	5
Franklin	2	Scott	0
Fulton	0	Shelby	3
Gibson	5	Spencer	3
Grant	30	Starke	0
Greene	1	Steuben	2
Hamilton	17	Sullivan	6
Hancock	2	St. Joseph	6
Harrison	0	Switzerland	1
Hendricks	1	Tippecanoe	14
Henry	6	Tipton	6
Howard	4	Union	0
Huntington	0	Vanderburgh	9
Johnson	5	Vigo	9
Jasper	4	Vermillion	0
Jackson	11	Wabash	7
Jay	6	Warren	7
Jefferson	3	Washington	4
Jennings	7	Warrick	4
Knox	7	Wayne	2
Kosciusko	4	Wells	1
Lagrange	0	White	4
Lake	3	Whitley	0
Laporte	4		
Lawrence	9	Total	473

Descriptive Roll of Children Admitted to Indiana Soldiers' and Sailors' Orphans' Home, From Nov. 1, 1906, to Oct. 1, 1907.

No.	Name of Child.	Date of Birth.	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Maiden Name of Mother.
1	Nugent, Robert F.	Dec. 26, 1900	Tippecanoe.	Jan. 13, 1907	Nugent, Robert F.	I, 2d N. Y. Cav.	
2	Shaffer, Clarence.	Jan. 2, 1895	Kosciusko.	Jan. 15, 1907	Shaffer, Daniel.	M, 90th Ind.	Saltzriver, Ella.
3	Telford, C. Delight.	Jan. 13, 1900	Wash.	Jan. 23, 1907	Telford, Samuel.	13th Penn. Cav.	Rudduck, Maggie.
4	Hobbs, Anna.	Feb. 5, 1892	Ripley.	Feb. 11, 1907	Hobbs, John W.	F, 83d Ind.	Smith, Sarah J.*
5	Parker, William.	Oct. 19, 1902	Delaware.	Mar. 6, 1907	Parker, George.*	B, 18th Ind.	Andes, Amanda.*
6	Joy, Silvia.	Aug. 9, 1897	Wabash.	Mar. 8, 1907	Joy, Peter.	I, 30th Ind.	Pebereda.
7	Castetter, Bessie.	Oct. 22, 1897	Grant.	Mar. 29, 1907	Castetter, Wm.	F, 35th Ind.	Smith, Sarah E.*
8	Grier, Hiram S.	July 3, 1902	Marion.	Apr. 13, 1907	Grier, Geo. R.	H, 158th Ind.	Hamilton, Fannie.*
9	Raible, Ruth.	May 3, 1904	Marion.	Apr. 13, 1907	Grier, Geo. R.	H, 158th Ind.	Hamilton, Fannie.*
10	Raible, Victor.	Oct. 1, 1898	Marion.	May 9, 1907	Raible, Joseph.	A, 32d Ind.	Pickle, Matilda.*
11	Raible, Gertrude.	Jan. 12, 1895	Marion.	May 9, 1907	Raible, Joseph.	A, 32d Ind.	Pickle, Matilda.*
12	Colfer, Emmett P.	Oct. 20, 1893	Grant.	June 5, 1907	Colfer, Thos. J.	E, 158th Ind.	Griffith, Belinda.*
13	Waite, M. Beulah.	May 4, 1904	Lake.	June 10, 1907	Waite, Claude M.	I, 157th Ind.	Bondreau, Josephine.*
14	Waite, Florence C.	July 20, 1902	Lake.	June 10, 1907	Waite, Claude M.	I, 157th Ind.	Bondreau, Josephine.*
15	Waite, Cecil.	July 29, 1900	Lake.	June 10, 1907	Waite, Claude M.	I, 157th Ind.	Bondreau, Josephine.*
16	Sherman, Robert.	Apr. 4, 1902	Knox.	Nov. 6, 1906	Sherman, Edward.	C, 42d Ill.	Pigg, Mary.
17	Sherman, Mary.	Oct. 27, 1903	Knox.	Nov. 6, 1906	Sherman, Edward.	C, 42d Ill.	Pigg, Mary.
18	Sherman, Edna.	Nov. 5, 1896	Knox.	Nov. 6, 1906	Sherman, Edward.	C, 42d Ill.	Pigg, Mary.
19	Sherman, Wm. T.	May 5, 1899	Knox.	Nov. 7, 1906	Sherman, Edward.	C, 42d Ill.	Pigg, Mary.
20	Hall, Leroy W.	Jan. 19, 1891	Knox.	Nov. 7, 1906	Hall, Frank.*	A, 26th Ind.	Robertson, R.*
21	Boyer, Ona.	Oct. 26, 1893	Vigo.	Nov. 12, 1906	Doyce, Nimrod.*	A, 26th Ind.	Conkling, A.*
22	Montross, Ruth.	Feb. 9, 1894	Clinton.	Nov. 19, 1906	Montross, James.	14th Ind. Bat.	Morris, Alice B.*
23	Montross, Glen E.	Feb. 29, 1896	Clinton.	Nov. 19, 1906	Montross, James.	14th Ind. Bat.	Morris, Alice B.*
24	Montross, Lorenzo L.	Oct. 21, 1897	Clinton.	Nov. 19, 1906	Montross, James.	14th Ind. Bat.	Morris, Alice B.*
25	Michael, Wiley.	Sept. 2, 1891	Montgomery.	Dec. 13, 1906	Michael, John.*	E, 150th Ind.	Penniwell, Charlotte.*
26	Fleetwood, Chas. V.	June 11, 1895	Hamilton.	Jan. 8, 1907	Fleetwood, Samuel.	D, 140th Ind.	Jarrett, Minerva J.*
27	Bright, Benjamin.	Sept. 14, 1900	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	E, 155th Ind.	Jarrett, Minerva J.*
28	Bright, Bessie.	Feb. 5, 1898	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	D, 140th Ind.	Jarrett, Minerva J.*
29	Bright, Nellie.	June 25, 1896	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	D, 140th Ind.	Jarrett, Minerva J.*
30	Bright, George B.	Mar. 3, 1894	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	D, 140th Ind.	Jarrett, Minerva J.*
31	Steele, Robert.	Jan. 1, 1897	Putnam.	June 24, 1907	Steele, Ransom H.*	K, 14th Ind.	Nelson, Mary E.*
32	Morgan, Mabel Marie.	Sept. 14, 1903	Monroe.	July 2, 1907	Morgan, Walter E.*	B, 16th Ind.	Gilham, Louella.
33	Morgan, Laura Irene.	Apr. 11, 1903	Monroe.	July 2, 1907	Morgan, Walter E.*	B, 16th Ind.	Gilham, Louella.
34	Loomis, Geo. M.	June 16, 1897	Vigo.	Aug. 19, 1907	Loomis, Geo. W.	A, 58th Ind.	Wortman, Ellie G.
35	Weston, Esther.	Aug. 3, 1893	White.	Sept. 1, 1907	Weston, S.	H, 6th Minn.	
36	Hurley, Viola Opal.	Nov. 28, 1900	Jasper.	Sept. 22, 1907	Hurley, Theodore.*	K, 48th Ind.	Knight, Mary A.*
37	Hurley, Clifford R.	Oct. 9, 1894	Jasper.	Sept. 22, 1907	Hurley, Theodore.*	K, 48th Ind.	Knight, Mary A.*
38	Hurley, Jasper Henry.	Oct. 27, 1895	Jasper.	Sept. 22, 1907	Hurley, Theodore.*	K, 48th Ind.	Knight, Mary A.*

Descriptive Roll of Children of Indiana Soldiers' and Sailors' Orphans' Home, Discharged From Nov. 1, 1906, to Oct. 2, 1907.

No.	Name of Child.	Date of Birth.	County.	Date of Discharge.	Reason for Discharge.	Trade Learned.
1	Hall, Leroy.....	Jan. 19, 1891	Marion.....	Dec. 3, 1906	Request of father.....	
2	Heston, Ruby.....	Jan. 8, 1891	Marion.....	Dec. 3, 1906	Request of mother.....	
3	Montgomery, Jesse.....	Dec. 2, 1891	Gibson.....	Dec. 3, 1906	Request of father.....	
4	Boggs, Fred.....	May 30, 1891	Howard.....	Dec. 3, 1906	Request of mother.....	
5	Rutenbaugh, Benj.....	June 11, 1894	Marion.....	Dec. 3, 1906	Request of father.....	
6	Jones, Earl.....	Nov. 8, 1890	Grant.....	Dec. 3, 1906	Age limit.....	
7	Keeling, Benj.....	Nov. 23, 1891	Grant.....	Dec. 3, 1906	Request of mother.....	
8	Hughes, Thomas.....	Jan. 12, 1891	St. Joseph.....	Dec. 3, 1906	Request of mother.....	
9	Weston, Esther.....	Aug. 3, 1893	White.....	Dec. 3, 1906	Request of father.....	
10	Butcher, Homer.....	Nov. 2, 1891	Monroe.....	Jan. 2, 1907	Continued absence.....	
11	Phillips, Gladys W.....	Oct. 16, 1897	Marion.....	Jan. 8, 1907	Dead.....	
12	St. John, Grace.....	July 4, 1891	Howard.....	Jan. 20, 1907	Age limit.....	
13	Miller, John.....	June 14, 1889	Howard.....	Feb. —, 1907	Continued absence.....	Printing.
14	Teague, Stanley J.....	Feb. 7, 1891	Vanderburgh.....	Feb. —, 1907	Continued absence.....	Baker.
15	Duck, Doris.....	Mar. 21, 1889	Marion.....	Feb. —, 1907	Age limit.....	Cooking school.
16	Leeson, Myrtle.....	Sept. 2, 1893	Bartholomew.....	Feb. —, 1907	Indenture.....	
17	Toon, Clarence.....	Nov. 2, 1890	Marion.....	Feb. 4, 1907	Age limit.....	Printer.
18	McCartney, Sara.....	Oct. 19, 1889	Delaware.....	Feb. 4, 1907	Age limit.....	Cooking.
19	Hoover, Anna.....	Feb. 4, 1896	Boone.....	Apr. 2, 1907	Age limit.....	Sewing.
20	McEntire, Noble.....	Mar. —, 1891	Warrick.....	Apr. 2, 1907	Indenture.....	
21	Radaabaugh, Walter.....	Nov. 23, 1890	Wabash.....	Apr. 2, 1907	Age limit.....	Engineer.
22	Morris, Holland.....	Aug. 8, 1889	Clark.....	Apr. 2, 1907	Age limit.....	Driver.
23	Greene, George.....	Sept. 7, 1891	Viso.....	Apr. 2, 1907	Age limit.....	Florist.
24	Nugent, Nuelle.....	Aug. 28, 1892	Tippecanoe.....	Apr. 2, 1907	Request of mother.....	
25	Saltsman, Hallie.....	Sept. 7, 1891	Warren.....	Apr. 2, 1907	Request of mother.....	
26	McCullough, Clifford.....	Oct. —, 1891	Wabash.....	Apr. 2, 1907	Request of sister.....	
27	Yarnell, Wm. H.....	Feb. 16, 1891	Miami.....	Apr. 2, 1907	Request of guardian.....	
28	Groves, Bessie.....	Apr. 1, 1889	Davess.....	Apr. 2, 1907	Age limit.....	Sewing.
29	Goodwin, Ira.....	Sept. 15, 1890	Spencer.....	May 1, 1907	Age limit.....	Carpenter.
30	Allen, Orville.....	Sept. 17, 1891	Boone.....	May 1, 1907	Request of father.....	
31	Moore, Riley A.....	Mar. 17, 1891	Blackford.....	May 1, 1907	Age limit.....	Farm.
32	Saxton, Benj.....	Jan. 25, 1890	Crawford.....	May 1, 1907	Age limit.....	Painter.
33	Smith, Oliver E.....	Nov. 20, 1889	Warren.....	June 3, 1907	Age limit.....	Printer.
34	Wyer, Arthur F.....	June 28, 1891	Grant.....	June 3, 1907	Age limit.....	Engineer.
35	Scott, Edward F.....	Dec. 17, 1889	Grant.....	June 3, 1907	Continued absence.....	Printer.
36	McCartney, Charles.....	July 18, 1891	Delaware.....	June 3, 1907	Continued absence.....	Printer.
37	Bronley, Chas. L.....	Apr. 14, 1891	Laporte.....	June 3, 1907	Age limit.....	Shoemaker.
38	Crockett, Moses E.....	Mar. 15, 1891	Pulaski.....	June 3, 1907	Age limit.....	Baker.
39	Howard, Brooks D.....	Jan. 26, 1890	Parke.....	June 3, 1907	Age limit.....	Farm.

Descriptive Roll of Children of Indiana Soldiers' and Sailors' Orphans' Home, Discharged From Nov. 1, 1906, to Oct. 2, 1907—Cont.

No.	Name of Child.	Date of Birth.	County.	Date of Discharge.	Reason for Discharge.	Trade Learned.
40	Pfafflin, Matilda.	May 15, 1889	Marion.	June 3, 1907	Age limit.	Stenographer.
41	Dudley, Anna B.	Mar. 20, 1890	Sullivan.	June 3, 1907	Age limit.	Stenographer.
42	Lane, Edward J.	Jan. 26, 1890	Marion.	June 3, 1907	Age limit.	Storeroom.
43	Hoover, Orton.	Mar. 11, 1891	Grant.	June 3, 1907	Age limit.	Printer.
44	Ruby, Benj. H.	Jan. 14, 1890	Marion.	June 3, 1907	Age limit.	Printer.
45	Chandler, Norman.	Dec. 9, 1890	Monroe.	July 2, 1907	Age limit.	Kitchen.
46	Clark, Carl V.	Feb. 2, 1891	Wells.	July 2, 1907	Age limit.	Cooking school.
47	Bell, Clarence.	Oct. 15, 1890	Hancock.	July 2, 1907	Age limit.	Farm and garden.
48	Bachelar, Henry.	June 28, 1890	Clay.	July 2, 1907	Age limit.	Laundry.
49	Fellers, John H.	Mar. 9, 1891	Kosciusko.	July 2, 1907	Age limit.	Florist.
50	Joinsom, Minnie.	July 12, 1890	Hamilton.	July 2, 1907	Age limit.	Cooking.
51	Kelley, William.	Aug. 26, 1890	Madison.	July 2, 1907	Age limit.	Florist.
52	Kelley, Wilbur.	Aug. 26, 1890	Madison.	July 2, 1907	Age limit.	Florist.
53	Kirchoff, Carl O.	June 12, 1891	Huntington.	July 2, 1907	Age limit.	Farm.
54	McCullough, Benj.	Oct. 9, 1889	Cass.	July 2, 1907	Age limit.	Stenographer.
55	Morris, Mable C.	Apr. 13, 1891	Vermilion.	July 2, 1907	Age limit.	Cooking school.
56	Mitchell, Roy Belle.	Mar. 16, 1891	Jennings.	Sept. 2, 1907	Age limit.	Cooking school.
57	St. John, Ada.	June 18, 1889	Hendricks.	Sept. 2, 1907	Age limit.	Kitchen.
58	Stewart, Zola.	Aug. 18, 1889	Lawrence.	Sept. 2, 1907	Age limit.	Florist.
59	Dorsett, Bertia.	Feb. 26, 1892	Cass.	Sept. 2, 1907	Age limit.	Carpenter.
60	Wars, Eva.	May 12, 1890	Madison.	Sept. 2, 1907	Age limit.	Cooking.
61	Cain, Helen.	Dec. 28, 1890	Madison.	Sept. 2, 1907	Age limit.	Cooking.
62	Neal, John.	July 27, 1891	Vanderburgh.	Sept. 2, 1907	Age limit.	Cooking.
63	Shater, Harry.	Sept. 22, 1890	Decatur.	Sept. 2, 1907	Age limit.	Carpenter.
64	Miller, Charles.	June 19, 1890	Marion.	Sept. 2, 1907	Age limit.	Cooking.
65	McLaughlin, Donaldson.	July 13, 1892	Delaware.	Sept. 2, 1907	Request of brother.	Cooking.
66	Seal, Minnie.	May 10, 1889	Franklin.	Sept. 2, 1907	Age limit.	Printer.
67	Case, James E.	Nov. 5, 1889	Marion.	Sept. 2, 1907	Age limit.	Stenographer.
68	Horn, Russell.	Aug. 12, 1891	Marion.	Sept. 2, 1907	Age limit.	Printer.
69	Robertson, Robert.	Aug. 6, 1890	Vanderburgh.	Sept. 2, 1907	Age limit.	Printer.
70	Johnson, Benj.	Aug. 12, 1891	Hamilton.	Sept. 2, 1907	Age limit.	Florist.
71	Sanders, Marc.	Apr. 24, 1891	Wayne.	Sept. 2, 1907	Age limit.	Stenographer.
72	Horne, Blanche.	Nov. 2, 1891	Grant.	Sept. 2, 1907	Age limit.	Cooking school.
73	Howard, Margaret.	Aug. 24, 1891	Parke.	Sept. 2, 1907	Age limit.	Cooking school.
74	Foster, George.	Nov. 2, 1891	Marion.	Sept. 2, 1907	Age limit.	Florist.
75	Hotchkiss, Harvey.	Aug. 23, 1891	Jay.	Sept. 2, 1907	Age limit.	Baker.
76	Ray, Orman.	July 29, 1891	Clark.	Sept. 2, 1907	Age limit.	Florist.
77	Williams, Maude.	June 6, 1890	Randolph.	Sept. 2, 1907	Age limit.	Cooking.

Descriptive Roll of Children in Indiana Soldiers' and Sailors' Orphans' Home, Oct. 1, 1907.

No.	Name of Child.	Date of Birth.	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Name of Mother.
1	Anderson, Ina C.	Jan. 19, 1892	Perry	July 8, 1898	Anderson, Thos. R.	G, 53d Ind.	Anderson, G.*
2	Askins, Theresa E.	Sept. 8, 1892	Perry	July 8, 1898	Anderson, Thos. R.	G, 53d Ind.	Askins, Sarah A.*
3	Allen, Sarah A.	Sept. 15, 1892	Madison	May 31, 1900	Askins, Jacob*	H, 36th Ind.	Allen, D. A.*
4	Allen, Martha E.	Dec. 2, 1893	Boone	Aug. 24, 1903	Allen, Wm.	H, 9th Ind. Cav.	Allen, D. A.*
5	Anderson, Harold.	Jan. 11, 1890	Boone	Aug. 24, 1903	Allen, Wm.	H, 9th Ind. Cav.	Anderson, S. E.
6	Anderson, Lola.	Aug. 27, 1895	Tippecanoe	Oct. 5, 1904	Anderson, Sam'l W.	—, 157th Ohio.	Anderson, Sarah E.*
7	Anderson, Alva L.	Sept. 4, 1891	Tippecanoe	Apr. 4, 1905	Anderson, Samuel W.	152d Ohio.	Bowman, N.
8	Bowman, Alva L.	Sept. 4, 1891	Clark	Sept. 5, 1898	Bowman, G. P.*	F, 66th Ind.	Bowman, N.
9	Blye, James.	Oct. 13, 1894	Hamilton	July 14, 1897	Blye, Jas.*	C, 1st Tenn.	Blye, Lena.*
10	Burton, Eva J.	Mar. 13, 1891	Martin	Oct. 6, 1897	Burton, John*	C, 3d Ky.	Muse, Mary.*
11	Blewett, Weaver H.	—, 1892	Martin	Oct. 6, 1897	Blewett, G. J.*	A, 12th Ky.	Blewett, M. E.
12	Buller, Oma F.	Sept. 15, 1890	Bartholomew	Mar. 24, 1899	Buller, Wm.	D, 7th Ind.	Buller, A. S.*
13	Bell, Lawrence	Oct. 3, 1892	Hancock	Aug. 25, 1899	Bell, Samuel	A, 36th Ind.	Bell, Mary.*
14	Brown, Maude A.	Mar. 13, 1893	Orange	Sept. 25, 1899	Brown, Jonathan*	E, 38th Ind.	Brown, S. P.*
15	Brown, Barbara.	—, 1895	Orange	Jan. 16, 1900	Brown, Jonathan*	E, 38th Ind.	Brown, S. P.*
16	Brown, Bryan.	Mar. 1, 1897	Orange	Jan. 16, 1900	Brown, Jonathan*	E, 38th Ind.	Brown, S. P.*
17	Bower, Emma.	Apr. 15, 1893	Clark	Oct. 16, 1900	Bower, Henry	C, 23d Ind.	Bower, M.*
18	Butcher, Carl.	June 15, 1892	Monroe	Oct. 16, 1900	Butcher, James H.*	A, 54th Ind.	Butcher, M. J.*
19	Butcher, Everett.	June 15, 1892	Monroe	Oct. 18, 1900	Butcher, James H.*	A, 54th Ind.	Butcher, M. J.*
20	Batts, Ethel.	May 21, 1894	Sullivan	Oct. 7, 1891	Batts, Alfred*	H, 85th Ind.	Batts, N.*
21	Batts, Mary.	Oct. 7, 1891	Sullivan	Sept. 2, 1901	Batts, Alfred*	H, 85th Ind.	Batts, N.*
22	Bartholomew, Maude.	Sept. 20, 1893	Hamilton	Sept. 26, 1901	Bartholomew, F.*	F, 38th Ind.	Bartholomew, M.
23	Boggs, Blanche.	Aug. 11, 1895	Howard	Nov. 2, 1893	Boggs, Almer*	C, 20th Ind.	Boggs, M.
24	Boggs, William.	Nov. 1, 1895	Howard	Oct. 3, 1901	Boggs, Almer*	C, 20th Ind.	Boggs, M.
25	Bailey, Earl W.	Sept. 23, 1899	Allen	Oct. 3, 1901	Bailey, Chas. W.	—, 45th Ind.	Bailey, Sophia J.
26	Bailey, Franklin A.	June 28, 1894	Allen	May 19, 1902	Bailey, Chas. W.	—, 45th Ind.	Bailey, Sophia J.
27	Barrgrover, James W.	June 14, 1892	Shelby	Sept. 12, 1902	Barrgrover, Daniel	F, 70th Ind.	Barrgrover, A. O.*
28	Barker, Gilbert.	Nov. 10, 1893	Madison	Oct. 2, 1902	Barker, Sam'l K.	D, 151st Ind.	Barker, H.*
29	Barker, Julia B.	June 10, 1896	Madison	Nov. 4, 1904	Barker, Sam'l K.	D, 151st Ind.	Barker, H.*
30	Bromley, Bertha M.	Nov. 18, 1896	Laporte	Feb. 4, 1904	Bromley, Wm. G.*	E, 73d Ind.	Carr, Phylena.
31	Bowman, Irene.	Dec. 23, 1893	Clark	Aug. 31, 1904	Bowman, John F.	H, 2d D. C. Vol.	Bowman, A. B.*
32	Bowman, Florence.	July 18, 1895	Clark	Apr. 19, 1904	Bowman, John F.	H, 2d D. C. Vol.	Bowman, A. B.*
33	Bachelor, Myrtle.	Aug. 6, 1893	Clay	Apr. 19, 1904	Bachelor, Sam'l*	I, 91st Ind.	Bachelor, P.*
34	Buck, Andra L.	Dec. 3, 1894	Martin	Apr. 20, 1904	Buck, Leland L.	C, 157th Ind.	Buck, Clara M.*
35	Bilderback, Rachel.	Oct. 15, 1898	Vanderburgh	May 16, 1904	Bilderback, J. L.*	B, 91st Ind.	Bilderback, Lizzie.
36	Bilderback, Benj. H.	Sept. 20, 1900	Vanderburgh	July 14, 1904	Bilderback, J. L.*	B, 91st Ind.	Bilderback, Lizzie.
37	Brinson, Oquindo.	Feb. 5, 1904	Jennings	July 5, 1905	Brinson, Jonathan M.	F, 10th U. S. Inf.	Brinson, Dollie E.

*Dead.

Descriptive Roll of Children—Continued.

No.	Name of Child.	Date of Birth.	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Name of Mother.
38	Brinson, Nola M.	Dec. 21, 1901	Jennings.	Feb. 22, 1905	Brinson, Jonathan M.	F. 10th U. S. Inf.	Brinson, Dollie E.
39	Brinson, Vernie G.	Nov. 20, 1897	Jennings.	Feb. 22, 1905	Brinson, Jonathan M.	F. 10th U. S. Inf.	Brinson, Dollie E.
40	Baker, Charles R.	Aug. 16, 1891	Elkhart.	Mar. 18, 1905	Baker, Henry*	F. 81st Ohio.	MacLean, Adelaide.
41	Baker, Jessie R.	Aug. 16, 1891	Elkhart.	Mar. 18, 1905	Baker, Henry*	F. 81st Ohio.	MacLean, Adelaide.
42	Baker, William E.	Mar. 2, 1896	Elkhart.	Mar. 18, 1905	Baker, Henry*	F. 81st Ohio.	MacLean, Adelaide.
43	Baker, Annie J.	Nov. 21, 1894	Elkhart.	Mar. 18, 1905	Baker, Henry*	F. 81st Ohio.	MacLean, Adelaide.
44	Bucy, Charles H.	July 2, 1903	Marion.	Aug. 8, 1905	Bucy, Charles E.	F. 161st Ind.	Bucy, Susie A.*
45	Bennett, Kyle B.	July 17, 1890	Henry.	Sept. 17, 1904	Bennett, Ross E.	24 Ind Bat.	Bennett, Cora B.
46	Bennett, Eldon G.	May 27, 1896	Henry.	Sept. 17, 1904	Bennett, Ross E.	24 Ind Bat.	Bennett, Cora B.
47	Bennett, Ruth C.	June 15, 1902	Henry.	Oct. 31, 1904	Bennett, Ross E.	24 Ind Bat.	Bennett, Cora B.
48	Bowman, Avery P.	Oct. 9, 1891	Miami.	Oct. 10, 1904	Bowman, J. W.*	G. 130th Ind.	Bowman, M.*
49	Barnes, Clarence.	Jan. 1, 1898	Marion.	Feb. 13, 1906	Barnes, Clayton*	G. 125th Ky.	Brisco, Sarah J.
50	Barnes, William.	May —, 1894	Marion.	Feb. 13, 1906	Barnes, Clayton*	G. 125th Ky.	Brisco, Sarah J.
51	Broshier, Russel.	Oct. 31, 1892	Jay.	May 15, 1906	Broshier, George*	C. 92d Ohio.	Beckdoff, Caroline.
52	Broshier, Vesta.	Sept. 25, 1895	Jay.	May 15, 1906	Broshier, George*	C. 92d Ohio.	Beckdoff, Caroline.
53	Baldwin, Gaynelle.	Aug. 14, 1895	Randolph.	June 6, 1906	Baldwin, John E.*	14th Ind. U. S. S. C.	Snodgrass, Cora A.
54	Baldwin, Moselle.	Aug. 14, 1895	Randolph.	June 6, 1906	Baldwin, John E.*	14th Ind. U. S. S. C.	Snodgrass, Cora A.
55	Baldwin, Wava.	Sept. 17, 1897	Randolph.	June 6, 1906	Baldwin, John E.*	14th Ind. U. S. S. C.	Snodgrass, Cora A.
56	Boyer, Oma.	Oct. 26, 1893	Vigo.	Nov. 12, 1906	Boyer, Nimrod*	A. 26th Ohio.	Conkling, A.
57	Bright, Benjamin.	Sept. 14, 1900	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	D. 140th Ind.	Jarrett, Minerva J.*
58	Bright, Bessie.	Feb. 5, 1898	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	D. 140th Ind.	Jarrett, Minerva J.*
59	Bright, Nellie.	June 25, 1896	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	D. 140th Ind.	Jarrett, Minerva J.*
60	Bright, George B.	Mar. 3, 1894	Bartholomew.	Jan. 8, 1907	Bright, Geo. B.*	D. 140th Ind.	Jarrett, Minerva J.*
61	Cavanaugh, Lewis.	June 28, 1892	Blackford.	Sept. 8, 1897	Cavanaugh, D.*	H. 104th Ind.	Cavanaugh, S.*
62	Coffman, Mary E.	July 29, 1890	Putnam.	Oct. 13, 1898	Coffman, J. S.	H. 104th Ind.	Coffman, L.*
63	Coffman, Raymond W.	Feb. 22, 1893	Putnam.	Oct. 13, 1898	Coffman, J. S.	H. 104th Ind.	Coffman, L.*
64	Conway, Lucy A.	Dec. 19, 1892	Allen.	Oct. 18, 1901	Conway, Wm.*	I. 16th Mich.	Daum, M. F.*
65	Conway, Ethel M.	Sept. 7, 1895	Allen.	Oct. 18, 1901	Conway, Wm.*	I. 16th Mich.	Daum, M. F.*
66	Conway, Wm. Harold.	Nov. 24, 1897	Allen.	Oct. 18, 1901	Conway, Wm.*	I. 16th Mich.	Daum, M. F.*
67	Campbell, Mary.	Sept. 2, 1893	Allen.	Oct. 22, 1901	Campbell, J. R.	C. 54th Ind.	Campbell, E.*
68	Creech, Grace O.	Aug. 28, 1893	Delaware.	May 8, 1902	Creech, Melvin*	H. 159th Ind.	Creech, Effie.
69	Creech, Lillian W.	Mar. 1, 1896	Delaware.	May 8, 1902	Creech, Melvin*	H. 159th Ind.	Creech, Effie.
70	Creech, Clyde C.	Sept. 23, 1901	Delaware.	Aug. 22, 1903	Creech, Melvin*	H. 159th Ind.	Creech, Effie.
71	Chase, George.	Dec. 2, 1891	Dearborn.	May 12, 1902	Chase, Jas. W.	E. 54th Ind.	Chase, G. A.*
72	Chase, Russell.	May 1, 1895	Dearborn.	May 12, 1902	Chase, Jas. W.	E. 54th Ind.	Chase, S. E.*
73	Conard, Edna J.	Jan. 14, 1891	Tipton.	Sept. 15, 1902	Conard, John N.	L. 11th Ind. Cav.	Conard, L. A.*
74	Conard, Elsie M.	Mar. 16, 1896	Tipton.	Sept. 15, 1902	Conard, John N.	L. 11th Ind. Cav.	Conard, L. A.*
75	Conard, Lillie E.	Apr. 2, 1899	Tipton.	Sept. 15, 1902	Conard, John N.	L. 11th Ind. Cav.	Conard, L. A.*
76	Crist, Mary.	Aug. 31, 1892	Dearborn.	Jan. 29, 1903	Crist, John*	A. 11th Ky. Cav.	Crist, S. J.*

77	Chandler, May	Nov. 22, 1893	Monroe	Apr. 15, 1903	Chandler, Wm. R.	E. 141st Ind.	Chandler, S.
78	Chandler, Wm. R.	June 4, 1895	Monroe	Apr. 15, 1903	Chandler, Wm. R.	E. 141st Ind.	Chandler, S.
79	Chandler, G. Fern	July 21, 1899	Monroe	Apr. 15, 1903	Chandler, Wm. R.	E. 141st Ind.	Chandler, S.
80	Chandler, Alberta E.	Sept. 15, 1891	Johnson	Aug. 27, 1903	Chandler, Wm. R.	E. 141st Ind.	Williams, N. C.
81	Carter, Brecken R.	June 28, 1893	Lawrence	Jan. 11, 1904	Carter, Brecken	D. 27th Ind.	Carter, Isabella.
82	Click, Bessie	Dec. 8, 1897	Adams	Jan. 11, 1904	Click, Joel	B. 2d U. S. Pat.	Click, H. E.*
83	Calhoun, Milton T.	Sept. 23, 1891	Marion	Jan. 13, 1904	Calhoun, C. C.	1st H. Art. Ind.	Calhoun, Lillie.
84	Case, Charles E.	Aug. 14, 1894	St. Joseph	Aug. 22, 1904	Case, Elwyn W.	1st H. Art. Ind.	Case, Mary B.*
85	Case, Harriet H.	July 3, 1896	St. Joseph	Aug. 22, 1904	Case, Elwyn W.	C. 48th Ind.	Case, Mary B.*
86	Clark, Russel A.	Oct. 1, 1893	White	Oct. 1, 1904	Clark, Andrew J.	C. 48th Ind.	Clark, Sarah P.
87	Clark, Otto B.	Jan. 28, 1891	White	Oct. 1, 1904	Clark, Andrew J.	C. 48th Ind.	Clark, Sarah P.
88	Coffeen, Helen	May 12, 1892	Marion	July 17, 1905	Coffeen, Henry F. C.	A. 69th Ohio	Blackburn, H.
89	Cavender, Arthur R.	Nov. 23, 1891	Marshall	Aug. 24, 1905	Cavender, Solomon	A. 19th Ohio	Cavender, E. E.*
90	Cavender, Russel	Aug. 16, 1894	Marshall	Aug. 24, 1905	Cavender, Solomon	A. 19th Ohio	Cavender, E. E.*
91	Cavender, Esther May	Aug. 21, 1896	Marshall	Aug. 24, 1905	Cavender, Solomon	A. 19th Ohio	Cavender, E. E.*
92	Cavender, Mary Lois	July 29, 1899	Madison	Sept. 12, 1905	Craft, Tilton	A. 19th Ohio	Cavender, E. E.*
93	Craft, Merle	June 29, 1903	Madison	Sept. 12, 1905	Children, John	D. 117th Ind.	Craft, Lulu
94	Children, Lily Olive	May 22, 1895	Lawrence	Sept. 13, 1905	Children, John	D. 117th Ind.	Children, Mary J.
95	Children, Daisy Marie	Sept. 1, 1896	Lawrence	Sept. 13, 1905	Children, John	D. 117th Ind.	Children, Mary J.
96	Children, Henry James	Mar. 1, 1899	Lawrence	Sept. 13, 1905	Children, John	D. 117th Ind.	Children, Mary J.
97	Children, Josie Esther	Nov. 1, 1901	Lawrence	Sept. 13, 1905	Children, John	D. 117th Ind.	Children, Mary J.
98	Children, Grace May	Feb. 13, 1892	Lawrence	Oct. 11, 1905	Children, John	D. 117th Ind.	Children, Mary J.
99	Children, Theodore R.	Sept. 22, 1904	Lawrence	Oct. 11, 1905	Children, John	D. 117th Ind.	Children, Mary J.
100	Children, Louie	Feb. 14, 1892	Randolph	Oct. 7, 1905	Chapins, William	U. S. S. Ex., Ohio	Chapins, Elizabeth*
101	Chesney, William M.	Dec. 15, 1898	Madison	Feb. 2, 1906	Chesney, Samuel H.	F. 12th Ohio	Miller, Harriet A.*
102	Chesney, Omer T.	Sept. 23, 1893	Kosciusko	Oct. 17, 1906	Carter, Thomas	K. 74th Ind.	Penny, Ella
103	Castetter, Bessie	Oct. 22, 1897	Grant	June 29, 1907	Castetter, Wm.	F. 35th Ind.	Smith, Sarah E.*
104	Colfer, Emmett P.	June 15, 1893	Grant	June 5, 1907	Colfer, Thos. J.	E. 158th Ind.	Griffith, Belinda*
105	Dudley, Ella	— 1892	Sullivan	July 3, 1900	Dudley, J. B.	G. 43d Ind.	Dudley, H. A.
106	Dudley, John	— 1894	Sullivan	July 3, 1900	Dudley, J. B.	G. 43d Ind.	Dudley, H. A.
107	Dudley, I. Donna	Mar. — 1897	Sullivan	Oct. 15, 1901	Dudley, J. B.	G. 43d Ind.	Dudley, H. A.
108	Davis, Mary M.	Aug. 4, 1891	Carroll	Jan. 19, 1899	Davis, Albert*	H. 3d Ind.	Davis, S. E.
109	Davis, Wm. Henry	Dec. 20, 1895	Carroll	Jan. 19, 1899	Davis, Albert*	H. 3d Ind.	Davis, S. E.
110	Dean, John	Oct. 6, 1893	Blackfoot	May 14, 1900	Dean, H. H.*	C. 58th Ohio	Dean, Anna*
111	Deardon, Delmer	Oct. — 1899	Montgomery	Oct. 11, 1900	Deardon, H. G.	D. 116th Ind.	Deardon, M.*
112	De Vannah, D. Burgess	Mar. 4, 1892	Grant	May 6, 1902	De Vannah, Daniel	E. 2d Minn.	De Vannah, S. J.*
113	Dawson, Lee J.	Jan. 26, 1891	Warren	Aug. 25, 1902	Dawson, Oliver M.	E. 27th Ind. Art.	Dawson, Ethie*
114	Dawson, Samuel C.	Oct. 12, 1892	Warren	Aug. 25, 1902	Dawson, Oliver M.	— 27th Ind. Art.	Dawson, Ethie*
115	Dante-Dodson, Fred	Oct. 30, 1895	Grant	Oct. 21, 1902	Dodson, David*	— 69th N. Y.	Dodson, M.*
116	Daniels, Hattie M.	Dec. 4, 1892	Monroe	Jan. 13, 1903	Dunihoo, Wm. P.*	F. 82d Ind.	Dodson, M.*
117	Dunihoo, William W.	June 3, 1894	Monroe	Jan. 13, 1903	Dunihoo, Wm. P.*	F. 82d Ind.	Parks, M. H.
118	Dunihoo, Joseph D.	May 24, 1899	Monroe	Jan. 13, 1903	Dunihoo, Wm. P.*	F. 82d Ind.	Parks, M. H.
119	Dunihoo, F. Layman	Dec. 18, 1901	Monroe	Jan. 13, 1903	Dunihoo, Wm. P.*	F. 82d Ind.	Parks, M. H.
120	Dunihoo, B. Chapman	Dec. 18, 1901	Monroe	Jan. 13, 1903	Dunihoo, Wm. P.*	F. 82d Ind.	Parks, M. H.
121	Davis, Amanda H.	Jan. 18, 1897	Brown	Mar. 27, 1903	Davis, R. S.*	G. 27th Ind.	Davis, Dora.
122	Davis, Delaney D.	Nov. 18, 1901	Brown	Mar. 27, 1903	Davis, R. S.*	G. 27th Ind.	Davis, Dora.

*Dead.

Descriptive Roll of Children—Continued.

No.	Name of Child.	Date of Birth.	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Name of Mother.
123	Davis, Charles E.	Apr. 15, 1899	Penn.	Apr. 7, 1903	Davis, R. S.*	G, 27th Ind.	Davis, Dora.
124	Deane, Norman D.	July 14, 1897	Madison	July 7, 1906	Deane, Frank H.	F, 177th Ohio	Noy, Margueritte A.
125	Deane, Frank U.	July 3, 1897	Madison	July 7, 1906	Deane, Frank H.	F, 177th Ohio	Noy, Margueritte A.
126	Dunkin, Marion C.	Jan. 27, 1895	Vero	Oct. 30, 1906	Dunkin, Frank M.	E, 33d Ind.	Conn, Kate.
127	English, Jesse.	Mar. 10, 1892	Gass	Sept. 27, 1893	English, M.*	H, 99th Ind.	English, W. A.*
128	Esbridge, Ruth A.	Mar. 26, 1892	Tipppecanee	Mar. 26, 1900	Esbridge, Seth	C, 29th Ind.	Esbridge, M. E.*
129	English, Ethel E.	Mar. 13, 1893	Rush	Sept. 8, 1902	English, Sam'l	M, 9th Ind. Cav	English, E. K.
130	English, Jessie.	May 2, 1896	Rush	Sept. 8, 1902	English, Sam'l	M, 9th Ind. Cav	English, E. K.
131	English, S. Pearl.	May 4, 1895	Rush	Sept. 8, 1902	English, Sam'l	M, 9th Ind. Cav	English, E. K.
132	Eakes, Marshall S.	Feb. 8, 1895	Gibson	Apr. 21, 1903	Eakes, James*	C, 12th Tenn. Cav	Eakes, Ella
133	Eakes, Roy M.	Apr. 24, 1897	Gibson	Apr. 21, 1903	Eakes, James*	C, 12th Tenn. Cav	Eakes, Ella
134	Evans, Clarence F.	Aug. 25, 1894	Vanderburgh	Apr. 20, 1905	Evans, John T.*	I, 40th Ill.	Evans, Alma.
135	Fellers, Elmer Ted.	Oct. 7, 1892	Kosciusko	Oct. 11, 1894	Fellers, A. J.*	K, 82d Ohio	Fellers, J. H.
136	Fleming, Cora.	Oct. 10, 1890	Allen	Nov. 13, 1894	Fleming, T.	D, 36th Ohio	Fleming, C.*
137	Finney, N. Marie.	Sept. 21, 1893	St. Joseph	Dec. 21, 1897	Finney, Thos.	E, 11th Vermont	Finney, M.
138	Finney, Mabel.	July 10, 1893	St. Joseph	Dec. 21, 1897	Finney, Thos.	E, 11th Vermont	Finney, M.
139	Fitzpatrick, Fred.	Aug. 5, 1893	Lawrence	Sept. 7, 1898	Fitzpatrick, H. H.	D, 50th Ind.	Fitzpatrick, L.*
140	Fuller, B. Harrison	July 26, 1892	Shelby	May 19, 1899	Fuller, J. H.	H, 11th Ind.	Fuller, H. E.
141	Fuller, C. Russell	Mar. 24, 1894	Shelby	May 19, 1899	Fuller, J. H.	H, 11th Ind.	Fuller, H. E.
142	Fleetwood, Chas. V.	June 11, 1895	Hamilton	Jan. 8, 1907	Fleetwood, Sam'l	E, 155th Ind.	Penniwel, Charlotte.*
143	Graham, Ray.	Dec. 29, 1894	Parke	Aug. 1, 1898	Graham, Geo.*	G, 71st Ind.	Graham, E.
144	Graham, Ray.	Dec. 29, 1894	Parke	Aug. 1, 1898	Graham, Geo.*	G, 71st Ind.	Graham, E.
145	Gray, Glenn.	Sept. 11, 1894	White	Mar. 16, 1899	Gray, Wm.	K, 12th Ind.	Gray, I. M.
146	Griffith, Lulu.	July 25, 1894	Pike	July 23, 1901	Griffith, W. C. P.*	H, 80th Ind.	Griffith, M.
147	Gilliland, Nellie M.	May 23, 1891	Decatur	Oct. 14, 1901	Gilliland, A. C.	—, 15th Ind. Bat.	Gilliland, S. E.*
148	Gilliland, Lela M.	Dec. 2, 1893	Decatur	Oct. 14, 1901	Gilliland, A. C.	—, 15th Ind. Bat.	Gilliland, S. E.*
149	Goodwin, Ida E.	Nov. 30, 1892	Spencer	Apr. 30, 1903	Goodwin, Wm. H.*	D, 12th Ky. Cav	Goodwin, H.
150	Goodwin, Golda M.	Dec. 30, 1894	Spencer	Apr. 30, 1903	Goodwin, Wm. H.*	D, 12th Ky. Cav	Goodwin, H.
151	Goodwin, John W.	Apr. 13, 1897	Grant	Apr. 21, 1904	Goodwin, Elsie J.	G, 3d N. Hamp.	Goodwin, Millie A.*
152	Goodwin, Fannie M.	May 7, 1892	Davess	May 17, 1904	Groves, John W.*	E, 6th Ind.	Groves, Mollie E.
153	Groves, Otis B.	June 14, 1893	Davess	May 17, 1904	Groves, John W.*	E, 6th Ind.	Groves, Mollie E.
154	Groves, J. A. Logan.	Sept. 28, 1895	Davess	May 17, 1904	Groves, John W.*	E, 6th Ind.	Groves, Mollie E.
155	Groves, Carrie A.	Jan. 15, 1898	Davess	May 17, 1904	Groves, John W.*	E, 6th Ind.	Groves, Mollie E.
156	Groves, Noble E.	Jan. 14, 1893	Davess	May 17, 1904	Groves, John W.*	E, 6th Ind.	Groves, Mollie E.
157	Gibbons, Charles H.	Apr. 28, 1892	Hamilton	July 2, 1904	Gibbons, James*	C, 150th Ill.	Confer, Laura.
158	Garrison, Charles H.	Apr. 28, 1892	Warrick	Oct. 12, 1905	Garrison, Joseph H.*	D, 120th Ind.	Garrison, D. K.
159	Garrison, Clarence W.	Mar. 11, 1894	Warrick	Oct. 12, 1905	Garrison, Joseph H.*	D, 120th Ind.	Garrison, D. K.
160	Gregory, David.	July 11, 1895	Madison	Dec. 13, 1905	Gregory, Edward*	10th Ky. Cav	Huddleston, Annie.
161	Green, Margueritte	Nov. 18, 1892	St. Joseph	Jan. 18, 1906	Green, George W.*	A, 38th Ohio	Stoddard, H. A.*

162	Garrison, Leota M.	June 29, 1897	Marion.....	Oct.	2, 1906	Garrison, Joseph H.*	D, 120th Ind.	Basham, D. K.
163	Gilbert, Leroy	July 8, 1895	Jefferson.....	Oct.	9, 1906	Gilbert, Thomas	E, 8th Tenn. Cav.	Willoughby, Ellen.
164	Gilbert, Ova S.	July 15, 1893	Jefferson.....	Oct.	9, 1906	Gilbert, Thomas	E, 8th Tenn. Cav.	Willoughby, Ellen.
165	Gilbert, Everett	Aug. 17, 1898	Jefferson.....	Oct.	20, 1906	Gilbert, Geo. R.	H, 158th Ind.	Hamilton, Fannie.*
166	Gider, Hiram S.	Aug. 9, 1902	Marion.....	Apr.	15, 1907	Gider, Geo. R.	F, 147th Ind.	Hamilton, Fannie.*
167	Gider, Mary M.	May 3, 1904	Marion.....	Apr.	15, 1907	Hall, S. J.*	F, 158th Ind.	Randall, M.
168	Hall, Kate.....	Sept. 26, 1891	Madison.....	Jan.	18, 1897	Hall, S. J.*	F, 147th Ind.	Randall, M.
169	Hall, Homer.....	July 25, 1894	Madison.....	Jan.	18, 1897	Hall, S. J.*	F, 147th Ind.	Randall, M.
170	Hart, Lorena.....	July 23, 1893	Gibson.....	Sept.	27, 1897	Hart, E.	C, 8th Ind.	Hart, J.*
171	Hart, Eliza.....	Apr. 9, 1893	Gibson.....	Sept.	27, 1897	Hart, E.	C, 8th Ind.	Hart, J.*
172	Horne, Otto.....	Sept. 24, 1894	Grant.....	Jan.	10, 1898	Horne, M.*	F, 34th Ind.	Horne, L. A.
173	Hornaday, Nellie.	June 28, 1891	Jackson.....	May	10, 1898	Hornaday, C.	15th Ind. L. A.	Hornaday, O.*
174	Hornaday, Emma.	Oct. 23, 1895	Jackson.....	May	10, 1898	Hornaday, C.	15th Ind. L. A.	Hornaday, O.*
175	Hornaday, Edward	Sept. 8, 1893	Jackson.....	May	10, 1898	Hughes, Taylor.	F, 29th Ind.	Hughes, C.
176	Hughes, Rava N.	July 31, 1894	Washington.....	May	10, 1898	Hughes, Taylor.	F, 29th Ind.	Hughes, C.
177	Hughes, Henry I.	Oct. 19, 1892	Washington.....	May	10, 1898	Hughes, Taylor.	F, 29th Ind.	Hughes, C.
178	Hughes, Universal	Nov. 10, 1890	Washington.....	May	10, 1898	Hughes, Taylor.	F, 29th Ind.	Hughes, C.
179	Hughes, Udis A.	Aug. 26, 1896	Washington.....	July	11, 1899	Herron, G. W.*	I, 124th Ind.	Herron, L. E.*
180	Herron, Carrie B.	Feb. 12, 1893	Hamilton.....	July	7, 1898	Hughes, P. W.*	I, 124th Ind.	Hughes, L. J.
181	Hughes, Jas. F.	July 22, 1893	St. Joseph.....	Sept.	8, 1898	Hughes, P. W.*	C, 32d Ind.	Hartsack, A. M.*
182	Hartsack, Minnie.	Mar. 27, 1896	Monroe.....	Dec.	15, 1898	Hartsack, S. A.*	C, 32d Ind.	Hartsack, A. M.*
183	Hitch, Clara.....	June 11, 1892	Vanderburgh.....	Jan.	10, 1899	Hitch, Thos.*	F, 14th Ind.	Hitch, M. E.
184	Hitch, John T.	Dec. 23, 1894	Vanderburgh.....	Jan.	10, 1899	Hitch, Thos.*	F, 14th Ind.	Hitch, M. E.
185	Hochstedler, Roy	Dec. 14, 1895	Grant.....	Sept.	1, 1899	Hochstedler, D.	A, 130th Ind.	Hochstedler, C.*
186	Hochstedler, Daniel	Nov. 8, 1892	Grant.....	Sept.	1, 1899	Hochstedler, D.	A, 130th Ind.	Hochstedler, C.*
187	Hoover, Arthur D.	Dec. 12, 1893	Grant.....	July	20, 1900	Hoover, D. Y.*	F, 34th Ind.	Hoover, R.
188	Hoover, Alice A.	Oct. 28, 1897	Grant.....	July	20, 1900	Hoover, D. Y.*	F, 34th Ind.	Hoover, R.
189	Hiers, Wm. J.	Oct. 28, 1895	Clinton.....	Feb.	14, 1901	Hiers, Robert*	D, 47th Ind.	Hiers, L. F.
190	Hiers, Matthew.	Mar. 28, 1899	Clinton.....	Feb.	14, 1901	Hiers, Robert*	D, 47th Ind.	Hiers, L. F.
191	Howard, Mary.....	Aug. 26, 1893	Parke.....	Apr.	11, 1901	Howard, F. M.*	F, 11th Ind. Cav.	Howard, M. A.
192	Howard, Daniel M.	Apr. 16, 1895	Parke.....	Apr.	11, 1901	Howard, F. M.*	F, 11th Ind. Cav.	Howard, M. A.
193	Hancock, John B.	Mar. 21, 1892	Owen.....	May	19, 1902	Hancock, Joseph*	D, 149th Ind.	Hancock, N. M.*
194	Hancock, Robert T.	May 31, 1896	Owen.....	May	19, 1902	Hancock, Joseph*	D, 149th Ind.	Hancock, N. M.*
195	Hatfield, Ivy E.	Feb. 16, 1894	Hendricks.....	June	2, 1902	Hatfield, James*	B, 51st Ind.	Hatfield, A. E.*
196	Hatchkiss, Leoni.	Sept. 30, 1890	Switzerland.....	Aug.	17, 1903	Hatchkiss, Geo. K.*	C, 129th Ind.	Hatchkiss, B.
197	Hill, Howard L.	July 16, 1893	Marshall.....	Sept.	25, 1902	Hill, James T.*	C, 129th Ind.	Hill, N. J.
198	Hill, Elden G.	Sept. 19, 1892	Marshall.....	Sept.	25, 1902	Hill, James T.*	C, 129th Ind.	Hill, N. J.
199	Hoover, Fred M.	Jan. 27, 1893	Boone.....	May	4, 1903	Hoover, Sam I.	H, 54th Ind.	Hoover, S. M.*
200	Hoover, Carl R.	Oct. 2, 1895	Boone.....	May	4, 1903	Hoover, Sam I.	H, 54th Ind.	Hoover, S. M.*
201	Horrall, Lillian B.	Mar. 15, 1893	Rush.....	Aug.	18, 1903	Horrall, Jas. T.	I, 60th Ind.	Horrall, Retta.*
202	Huddleson, Mamie	Mar. 16, 1890	Marion.....	Apr.	28, 1904	Huddleson, James P.*	A, 11th Ind.	Huddleson, Mathilda.
203	Himes, Joseph L.	Aug. 28, 1891	Marshall.....	July	17, 1904	Himes, Joseph*	F, 74th Ind.	Shaw, Emma.
204	Himes, Logan.....	Nov. 24, 1893	Marshall.....	July	17, 1904	Himes, Joseph*	F, 74th Ind.	Shaw, Emma.
205	Himes, Hazel M.	Sept. 3, 1896	Marshall.....	July	17, 1904	Himes, Joseph*	F, 74th Ind.	Shaw, Emma.
206	Himes, Admiral A.	Sept. 12, 1899	Marshall.....	July	17, 1904	Himes, Joseph*	F, 74th Ind.	Shaw, Emma.
207	Himes, Landon C.	Sept. 1, 1891	Marshall.....	July	15, 1905	Himes, Joseph*	F, 74th Ind.	Shaw, Emma.

*Dead

Descriptive Roll of Children—Continued.

No.	Name of Child.	Date of Birth.	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Name of Mother.
208	Higgins, Mabel C.	Apr. 13, 1893	Vigo	Aug. 11, 1904	Higgins, Wm.*	H. 152d Ill.	Higgins, Z. B.
209	Higgins, Forest McK.	Apr. 4, 1897	Vigo	Aug. 11, 1904	Higgins, Wm.*	H. 152d Ill.	Higgins, Z. B.
210	Higgins, Harry L. Z.	Nov. 14, 1901	Vigo	Aug. 11, 1904	Higgins, Wm.*	H. 152d Ill.	Higgins, Z. B.
211	Holeman, Mark H.	June 22, 1893	Johnson	Oct. 2, 1904	Holeman, Isaac W.	A. 120th Ind.	Clark, Sarah P.
212	Heckman, Charles H.	July 2, 1898	Wells	Aug. 18, 1905	Heckman, John H.	182d Ohio	Heckman, Emma
213	Harrell, Grover	Aug. 5, 1895	Clay	Sept. 13, 1905	Harrell, Joseph*	D. 51st Ind.	Harrell, Mary Bell.
214	Harrell, Anna	Apr. 8, 1893	Marion	Aug. 31, 1906	Harrell, Joseph*	D. 51st Ind.	Harrell, Mary Bell.
215	Horn, Goldie Pearl	Oct. 3, 1898	Marion	Aug. 31, 1906	Horn, James M.	H. 155th Ind.	Montgomery, M. E.*
216	Hankins, Garfield I.	Sept. 17, 1892	Tipton	Jan. 9, 1906	Hankins, John R.	H. 155th Ind.	Elliott, Elizabeth J.*
217	Hammel, Chester	Jan. 25, 1895	Clinton	Apr. 11, 1906	Hammel, Jonas*	C. 10th Ind.	Easterly, Phoebe A.
218	Hammel, Lester	Jan. 25, 1895	Clinton	Apr. 11, 1906	Hammel, Jonas*	C. 10th Ind.	Easterly, Phoebe A.
219	Hammel, Martha	Feb. 5, 1897	Clinton	Apr. 11, 1906	Hammel, Jonas*	C. 10th Ind.	Easterly, Phoebe A.
220	Hammel, Vernon	Feb. 7, 1899	Clinton	Apr. 11, 1906	Hammel, Jonas*	C. 10th Ind.	Easterly, Phoebe A.
221	Hardin, Minor	Aug. 27, 1893	Warrick	Aug. 5, 1906	Hardin, Wm. N.*	K. 35th Ky.	Worden, Frances
222	Hardin, Albert Nolan	Jan. 18, 1899	Warrick	Aug. 5, 1906	Hardin, Wm. N.*	K. 35th Ky.	Worden, Frances
223	Harris, Earle	July 21, 1901	Kosciusko	Aug. 20, 1906	Harris, Scott E.	H. 160th Ind.	Morgan, Lizzie
224	Hughston, Viola	Dec. 12, 1899	Madison	Sept. 18, 1906	Hughston, Alexander	B. 19th U. S. Inf.	Thorp, Sarah Jane.*
225	Hughston, Thomas	Sept. 15, 1896	Madison	Sept. 18, 1906	Hughston, Alexander	B. 19th U. S. Inf.	Thorp, Sarah Jane.*
226	Hobbs, Anna	Mar. 5, 1892	Ripley	Feb. 11, 1907	Hobbs, John W.*	F. 82d Ind.	Smith, Sarah J.*
227	Hurley, Viola Opal	Nov. 29, 1900	Jasper	Sept. 22, 1907	Hurley, Theodore*	K. 48th Ind.	Knight, Mary A.*
228	Hurley, Clifford R.	Oct. 9, 1894	Jasper	Sept. 22, 1907	Hurley, Theodore*	K. 48th Ind.	Knight, Mary A.*
229	Hurley, Jasper Henry	Oct. 27, 1895	Jasper	Sept. 22, 1907	Hurley, Theodore*	K. 48th Ind.	Knight, Mary A.*
230	Johnston, Clara	Aug. 2, 1891	Marion	Dec. 26, 1896	Johnston, M.*	D. 3d Ind. Cav.	Johnston, J. E.
231	Johnston, Ruth	Apr. 15, 1893	Marion	Dec. 26, 1896	Johnston, M.*	D. 3d Ind. Cav.	Johnston, J. E.
232	Johnston, Paul	Sept. 6, 1895	Marion	Sept. 28, 1897	Johnston, M.*	D. 3d Ind. Cav.	Johnston, J. E.
233	Johnston, Jesse	Mar. 29, 1893	Hamilton	Aug. 10, 1899	Johnston, Thos.	C. 130th Ind.	Johnston, J. E.
234	Johnson, James	Feb. 13, 1896	Hamilton	Aug. 31, 1899	Johnson, Thos.	C. 130th Ind.	Johnson, L.
235	Johnson, Oscar	Sept. 10, 1891	Hamilton	Aug. 31, 1899	Johnson, Thos.	C. 130th Ind.	Johnson, L.
236	Jack, Albert	Sept. 2, 1891	Hancock	Sept. 11, 1900	Jack, Jas.*	K. 134th Ind.	Jack, M. J.*
237	Jessup, Raleigh	July 14, 1892	Hamilton	Sept. 5, 1902	Jessup, Samuel	H. 1st Ind. H. Art.	Jessup, D. B.
238	Jessup, John	Dec. 19, 1893	Hamilton	Sept. 5, 1902	Jessup, Samuel	H. 1st Ind. H. Art.	Jessup, D. B.
239	Jessup, Jennie	July 21, 1896	Hamilton	Sept. 5, 1902	Jessup, Samuel	H. 1st Ind. H. Art.	Jessup, D. B.
240	Jessup, S. Boyd	Nov. 25, 1897	Hamilton	Sept. 5, 1902	Jessup, Samuel	H. 1st Ind. H. Art.	Jessup, D. B.
241	Johnson, Martha A.	Nov. 17, 1897	Clark	Apr. 9, 1904	Johnson, Chas. F.*	F. 6th Ind.	Johnson, Maggie.
242	Johnson, Louise F.	Nov. 17, 1897	Clark	Apr. 9, 1904	Johnson, Chas. F.*	F. 6th Ind.	Johnson, Maggie.
243	Johnson, Goldie B.	Aug. 30, 1892	Clark	Apr. 9, 1904	Johnson, Chas. F.*	F. 6th Ind.	Johnson, Maggie.
244	Johnson, Lottie I.	Mar. 6, 1895	Clark	Apr. 9, 1904	Johnson, Chas. F.*	F. 6th Ind.	Johnson, Maggie.
245	Jones, Grace M.	June 12, 1899	Grant	May 5, 1905	Jones, Henry*	E. 60th Ill.	Jones, Mary E.
246	Jones, Christopher L.	Mar. 17, 1897	Grant	May 5, 1905	Jones, Henry*	E. 60th Ill.	Jones, Mary E.

247	Jones, Hazel E.	Nov	3, 1893	Grant	May	5, 1905	Jones, Henry*	E, 60th Ill.	Jones, Mary E.
248	Joy, Millie Bell	Mar.	4, 1893	Wabash	Mar.	29, 1906	Joy, Peter	I, 39th Ind	Vandugan, Rebecca
249	Joy, Noah	Mar.	9, 1895	Wabash	Mar.	29, 1906	Joy, Peter	I, 39th Ind	Vandugan, Rebecca
250	Joy, Silvia	Aug.	9, 1897	Wabash	Mar.	8, 1907	Joy, Peter	I, 39th Ind	Vandugan, Rebecca
251	King, Ralph	Aug.	30, 1891	Vigo	Feb.	13, 1897	King, Wm.*	I, 133d Ind.	King, M.
252	Kingery, Virgil W	Sept.	17, 1894	Jennings	Sept.	10, 1903	Kingery, Wm. F.*	K, 95th Ind	Kingery, Fannie *
253	Kitts, Ada M.	Feb.	2, 1890	Jennings	July	3, 1899	Kitts, Jas S.*	B, 6th Ind	Kitts, S. E.*
254	Kitts, Martha B.	Aug.	5, 1892	Jennings	July	3, 1899	Kitts, Jas S.*	B, 6th Ind	Kitts, S. E.*
255	Kitts, James A.	Jan.	3, 1894	Jennings	July	3, 1899	Kitts, Jas S.*	B, 6th Ind	Kitts, S. E.*
256	Kitts, D. Opal	May	7, 1896	Jennings	Oct.	11, 1902	Keller, Allen	F, 12th Ind.	Kitts, S. E.*
257	Keller, Harry	June	3, 1893	Madison	Oct.	11, 1902	Keller, Allen	F, 12th Ind.	Keller, S. K.
258	Keller, Cecil B.	July	5, 1894	Madison	Oct.	11, 1902	Keller, Allen	F, 12th Ind.	Keller, S. K.
259	Keller, Essie M.	Apr.	3, 1897	Madison	Apr.	11, 1906	Kaber, Henry	B, 32d Ind	Borkman, Mary E.*
260	Kaber, Effie May	July	3, 1896	Laporte	Sept.	31, 1906	Keeling, George	C, 15th Ill	Worden, Frances
261	Keeling, Odetta	June	12, 1892	Floyd	Sept.	19, 1895	Kelly, Chas. A.	7th Mass. Bat.	Felch, Emma M.
262	Kelly, Allen G.	Feb.	12, 1892	Vigo	Feb.	12, 1895	Lammert, J.*	E, 15th Ind	Lammert, A.*
263	Lammert, Harry	Apr.	1, 1892	Marion	Aug.	8, 1901	Lane, Jas. J.*	G, 27th Ind	Lane, L. A.
264	Lane, A. Catharine	Jan.	31, 1892	Marion	Aug.	8, 1901	Lane, Jas. J.*	G, 27th Ind	Lane, L. A.
265	Lane, Addie	Feb.	20, 1895	Marion	Aug.	8, 1901	Lane, Jas. J.*	G, 27th Ind	Lane, L. A.
266	Lane, Wm. M.	Sept.	20, 1896	Mariou	Aug.	8, 1901	Lansford, John H.*	K, 27th Ind	Lansford, R. E.*
267	Lansford, John	Dec.	10, 1893	Dubois	Sept.	18, 1902	Lucas, John E.*	L, 1st Tenn	Lucas, Ellen
268	Lucas, Wm.	Sept.	16, 1889	Delaware	Sept.	27, 1902	Leland, John B.	L, 1st Tenn	Leland, M. C.*
269	Leland, Doris L.	Aug.	25, 1899	Miami	Oct.	1, 1902	Lavanway, Frank*	F, 138th Ind. Bat.	Lavanway, S. J
270	Lavanway, Mary M.	Aug.	2, 1892	Allen	May	21, 1903	Lavanway, Frank*	11th Ind. Bat.	Lavanway, S. J
271	Lavanway, George A.	Apr.	27, 1895	Allen	May	21, 1903	Lavanway, Frank*	11th Ind. Bat.	Lavanway, S. J
272	Lavanway, Henry W	Aug.	2, 1897	Allen	May	21, 1903	Lavanway, Frank*	11th Ind. Bat.	Lavanway, S. J
273	Lichter, Joshua J.	Feb.	13, 1891	Owen	Nov.	21, 1903	Lichter, Geo. W.*	D, 59th Ind	Lichter, Armilda.
274	Layton, Grace D.	Oct.	21, 1891	Tippecanoe	Mar.	21, 1904	Layton, Hobart H	D, 40th Ind	Layton, Eliza
275	Layton, Phillis	Aug.	31, 1897	Tippecanoe	Mar.	21, 1904	Layton, Hobart H	D, 40th Ind	Layton, Eliza
276	Lockhart, Nellie	May	4, 1901	Jackson	Nov.	9, 1905	Lockhart, Andrew J.*	B, 22d Ind	Avery, Annie B.
277	Lockhart, Nora	Dec.	6, 1897	Jackson	Nov.	9, 1905	Lockhart, Andrew J.*	B, 22d Ind	Avery, Annie B.
278	Lockhart, Virgil	Dec.	18, 1895	Jackson	Nov.	9, 1905	Lockhart, Andrew J.*	B, 22d Ind	Avery, Annie B.
279	Lockhart, O'arence	Feb.	24, 1894	Jackson	Nov.	9, 1905	Lockhart, Andrew J.*	B, 22d Ind	Avery, Annie B.
280	Lane, Henry F.	Oct.	12, 1901	Morgan	Aug.	9, 1906	Lane, Greenberry*	B, 135th Ind	Vick, Fannie D.
281	Lane, Velmer	Oct.	19, 1899	Morgan	Aug.	9, 1906	Lane, Greenberry*	B, 135th Ind	Vick, Fannie D.
282	Lane, Leroy	Jan.	12, 1897	Morgan	Aug.	9, 1906	Lane, Greenberry*	B, 135th Ind	Vick, Fannie D.
283	Lane, Claude	Dec.	1, 1894	Morgan	Aug.	9, 1906	Lane, Greenberry*	B, 135th Ind	Vick, Fannie D.
284	Loomis, Geo. M.	June	16, 1897	Vigo	Aug.	11, 1895	Loomis, Geo. W.	A, 58th Ind.	Wortman, Elsie G.
285	Miller, Anna	Nov.	5, 1892	Marion	Mar.	11, 1895	Miller, Geo. W.	D, 123d Ind	Miller, R.
286	Morgan, Ruth	Aug.	3, 1892	Putnam	Aug.	31, 1899	Morgan, T. J.*	I, 27th Ind	Tobin, S.
287	Miller, J. Arthur	Apr.	2, 1895	Howard	Sept.	29, 1896	Miller, A.	C, 12th Ind	Miller, E.*
288	McMullen, Maggie	Mar.	14, 1895	Dearborn	Apr.	13, 1897	McMullen, Jas.*	C, 2d Va.	McMullen, M.
289	McMullen, Mary	May	11, 1891	Dearborn	July	17, 1905	McMullen, James*	C, 2d Va.	McMullen, M.
290	McMullen, Kit Carson	July	3, 1893	Dearborn	Oct.	16, 1906	McMullen, James*	C, 2d Va.	McMullen, M.
291	Mitchell, Glenn	Apr.	21, 1892	Henry	July	14, 1897	Mitchell, Thos.*	Ram Avenger	Mitchell, S.
292	Mitchell, Florence	Dec	21, 1894	Henry	July	14, 1897	Mitchell, Thos.*	Ram Avenger	Mitchell, S.

*Dead.

Descriptive Roll of Children—Continued.

No.	Name of Child.	Date of Birth.	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Name of Mother.
293	Mathews, Wakeman.	Dec. 28, 1891	Clark.	Sept. 15, 1898	Mathews, W. S.	D, 14th N. Y.	Mathews, D. A.*
294	Mathews, Val Speed.	Sept. 8, 1895	Clark.	Sept. 15, 1898	Mathews, W. S.	D, 14th N. Y.	Mathews, D. A.*
295	Morse, Isora.	Mar. 11, 1891	Steuben.	Mar. 20, 1899	Morse, S.	B, 4th Mich.	Morse, A.*
296	Morse, John H.	July 4, 1893	Steuben.	Mar. 20, 1899	Morse, S.	B, 4th Mich.	Morse, A.*
297	Mason, Aaron.	Mar. 19, 1892	Fayette.	Aug. 8, 1899	Mason, L.*	C, 39th Ind.	Mason, L. B.
298	Mondon, Lizzie.	Nov. 19, 1892	Marion.	Mar. 23, 1900	Mondon, B.	C, 101st Ind.	Mondon, M. E.
299	Masters, John V.	May 11, 1893	Marion.	Nov. 8, 1901	Masters, John*	D, 3d Ill. Cav.	Masters, M. A.
300	Masters, Charles A.	Oct. 22, 1897	Marion.	Nov. 8, 1901	Masters, John*	D, 3d Ill. Cav.	Masters, M. A.
301	Morris, John.	Oct. 13, 1892	Clark.	Sept. 1, 1900	Morris, Wm.	—, 1st O. Inf.	Morris, M. C.
302	Morris, William.	Aug. 6, 1896	Marion.	Sept. 3, 1901	Morris, Wm.	—, 1st O. Inf.	Morris, M. C.
303	McDonald, Homer F.	Nov. 10, 1891	Clark.	Sept. 2, 1900	McDonald, D. B.	I, 23d Ind.	McDonald, K. J.*
304	McLaughlin, Thomas B.	Jan. 18, 1897	Delaware.	Jan. 30, 1901	McLaughlin, Thos. J.*	M, 6th Ind. Cav.	McLaughlin, M. A.*
305	McLaughlin, Perry F.	Jan. 4, 1899	Delaware.	Jan. 30, 1901	McLaughlin, Thos. J.*	M, 6th Ind. Cav.	McLaughlin, M. A.*
306	McKee, Lola E.	Dec. 3, 1891	Knox.	July 30, 1901	McKee, D. H.	G, 33d Ind.	McKee, L. E.*
307	McKee, Della.	Dec. 3, 1891	Knox.	July 30, 1901	McKee, D. H.	G, 33d Ind.	McKee, L. E.*
308	Marksbury, George.	July 18, 1891	Montgomery.	Oct. 15, 1901	Marksbury, J.	K, 17th Ind.	Marksbury, S.*
309	Marksbury, John.	Jan. 6, 1894	Montgomery.	Oct. 15, 1901	Marksbury, J.	K, 17th Ind.	Marksbury, S.*
310	Minerly, Albert C. T.	Aug. 20, 1891	Madison.	Oct. 15, 1901	McGibbons, J.*	C, 16th N. Y.	Minerly, C.
311	Munsell, Julia A.	Oct. 27, 1893	Allen.	Sept. 16, 1902	Munsell, Joel M.	D, 73th Ind.	Munsell, Mary.
312	Munsell, Albert C.	Mar. 13, 1891	Hamilton.	Dec. 24, 1902	Munsell, Henry*	14th Ind. Bat.	Morris, Alice B.*
313	Montross, H. Mildred.	Nov. 20, 1902	Clinton.	Apr. 22, 1903	Montross, James.	14th Ind. Bat.	Morris, Alice B.*
314	Montross, Lorenzo L.	Oct. 21, 1897	Clinton.	Nov. 9, 1907	Montross, James.	14th Ind. Bat.	Morris, Alice B.*
315	Montross, Glen E.	Mar. 29, 1896	Clinton.	Nov. 9, 1907	Montross, James.	14th Ind. Bat.	Morris, Alice B.*
316	Montross, Ruth.	Feb. 9, 1894	Cass.	May 11, 1903	Morris, Jas. A.*	I, 13th Ind. Cav.	Morris, N. J.*
317	Morris, Ethel B.	May 29, 1893	Cass.	May 11, 1903	Morris, Jas. A.*	I, 13th Ind. Cav.	Morris, N. J.*
318	Marshall, Clint.	Nov. 11, 1891	Fountain.	Sept. 14, 1904	Marshall, Wm. H.*	A, 31st Ind.	Marshall, M.
319	Marshall, Daisy.	May —, 1896	Grant.	Sept. 14, 1904	Marshall, Wm. H.*	A, 31st Ind.	Marshall, M.
320	Mars, Joseph.	Aug. 14, 1894	Grant.	Mar. 17, 1905	Mars, Silas	I, 101st Ind.	Mars, Mary.
321	Mars, Manerva.	Apr. 12, 1898	Grant.	Mar. 17, 1905	Mars, Silas	I, 101st Ind.	Mars, Mary.
322	Mars, Matilda.	Jan. 31, 1902	Grant.	Mar. 17, 1905	Mars, Silas	I, 101st Ind.	Mars, Mary.
323	Morrison, Ethel Clodine.	Aug. —, 1894	Tippicanoe.	Aug. 9, 1905	Morrison, John W.	E, 175th Ind.	Morrison, Mary E.
324	Miller, Joseph H.	Sept. 21, 1892	Marion.	Jan. 11, 1906	Miller, Cassius M.*	K, 5th Ohio.	—, —, p.
325	Martin, Mamie.	Feb. 16, 1896	Grant.	Oct. 17, 1906	Michael, John*	E, 130th Ind.	Evans, Sarah
326	Michael, Wiley.	Sept. 2, 1891	Montgomery.	Dec. 13, 1906	Michael, John*	E, 130th Ind.	—, —, p.
327	Morgan, Laura Irene.	Apr. 11, 1903	Monroe.	July 2, 1907	Morgan, Walter E.*	B, 16th Ind.	Gillham, Louella.
328	Morgan, Mabel Marie.	Sept. 14, 1901	Monroe.	July 2, 1907	Morgan, Walter E.*	B, 16th Ind.	Gillham, Louella.
329	Newby, Benj. H.	June 7, 1891	Benton.	Aug. 24, 1898	Newby, R. F.	—, 28th Mass.	Newby, A. P.*
330	Newby, Wm. R.	Aug. 19, 1892	Benton.	Aug. 24, 1898	Newby, R. F.	—, 28th Mass.	Newby, A. P.*
331	Nicholson, Ona A.	Jan. 10, 1895	Orange.	Mar. 30, 1901	Nicholson, Wm. M.*	A, 66th Ind.	Nicholson, A.*

332	Neal, Scott.	Mar. 27, 1893	Vanderburgh.	Aug. 18, 1903	Neal, Wm. H. *	E, 12th Ill. Cav.	Neal, S. C.
333	Neal, Nellie M.	Feb. 11, 1893	Vanderburgh.	Aug. 18, 1903	Neal, Wm. H. *	E, 12th Ill. Cav.	Neal, S. C.
334	Nugent, Clifford M.	Oct. 12, 1893	Tippecanoe.	Oct. 1, 1905	Nugent, Robert M. *	I, 24 N. Y.	Nugent, Harriet.
335	Nugent, Clarence E.	Aug. 30, 1895	Tippecanoe.	Oct. 1, 1905	Nugent, Robert M. *	I, 24 N. Y.	Nugent, Harriet.
336	Nugent, Sterling G.	Jan. 21, 1898	Tippecanoe.	Aug. 26, 1906	Nugent, Robert M. *	I, 24 N. Y.	Murphy, Harriet.
337	Nugent, Robert F.	Dec. 26, 1900	Tippecanoe.	Aug. 13, 1907	Nugent, Robert M. *	I, 24 N. Y.	Murphy, Harriet.
338	O'Neal, May	May 6, 1892	Henry.	Aug. 28, 1900	O'Neal, Wm. *	D, 3d Ind.	DeHoff, C.
339	Purdy, Leo.	Nov. 2, 1891	Marion.	July 12, 1897	Purdy, Chas.	G, 51st Ind.	Purdy, M. *
340	Purdy, Cleo.	Nov. 2, 1891	Marion.	July 12, 1897	Purdy, Chas.	G, 51st Ind.	Purdy, M. *
341	Piffer, Fred.	June 27, 1893	Putnam.	July 12, 1899	Piffer, M. *	B, 62d Penn.	Piffer, Ida. *
342	Piffin, George.	Apr. 16, 1893	Marion.	Apr. 14, 1899	Piffin, Otto. *	Band, 15th Ind.	Piffin, A.
343	Perkins, Oliver.	Jan. 30, 1891	Hamilton.	Nov. 6, 1899	Perkins, C. C. *	G, 1st Conn. Cav.	Perkins, A. E.
344	Phillips, Helen L.	Jan. 30, 1894	Hamilton.	July 19, 1901	Phillips, Wm. A. *	B, 28th Mass.	Phillips, J.
345	Persley, Grace M.	Jan. 3, 1898	Miami.	May 19, 1902	Persley, Wm.	D, 7th Iowa Cav.	Persley, F. *
346	Purple, John Edwin.	Aug. 30, 1898	Fountain.	Mar. 13, 1905	Purple, Edwin.	B, 17th Ind.	Purple, Edwin. *
347	Palmer, Bonnie J.	July 26, 1903	Marion.	Nov. 6, 1905	Palmer, Ira H. *	H, 161st Ind.	Pea, Goldie M.
348	Palmer, Myrtle C.	Feb. 22, 1902	Marion.	Nov. 6, 1905	Palmer, Ira H. *	H, 161st Ind.	Pea, Goldie M.
349	Plake, Dorsey Claude.	Feb. 18, 1894	Tipton.	Nov. 7, 1905	Plake, Mathias. *	K, 153d Ind.	McVay, Sarah L. *
350	Plake, Roma, M.	May 11, 1896	Tipton.	Nov. 7, 1905	Plake, Mathias. *	K, 153d Ind.	McVay, Sarah L. *
351	Passwater, Elvora.	June 1, 1898	Marion.	Apr. 12, 1908	Passwater, Abraham. *	I, 75th Ind.	Amernman, M. A.
352	Porter, Caloxy Valentine.	Feb. 14, 1902	Madison.	Oct. 11, 1906	Porter, David S.	I, 130th Ind.	Matchett, Elizabeth. *
353	Parker, William.	Oct. 19, 1902	Delaware.	Mar. 6, 1907	Parker, George. *	B, 18th Ind.	Andes, Amanda. *
354	Ross, Wm. T.	Jan. 23, 1892	Martin.	Aug. 17, 1896	Ross, S. R. *	I, 33d Ind.	Ross, S. D. *
355	Robertson, Andrew F.	Apr. 1, 1893	Vanderburgh.	Mar. 16, 1899	Robertson, J. S. *	I, 25th Ind.	Robertson, H. E. *
356	Ransom, M. Josephine.	July 4, 1891	Dekalb.	Sept. 19, 1899	Ransom, A. A.	E, 138th Ind.	Ransom, M. R. *
357	Ransom, Blair E.	Feb. 24, 1893	Dekalb.	Sept. 19, 1899	Ransom, A. A.	E, 138th Ind.	Ransom, M. R. *
358	Ray, Hazel Lee.	Dec. 18, 1897	Clark.	July 8, 1900	Ray, A. S.	G, 99th Ind.	Ray, A. E. *
359	Ray, John Wesley.	Mar. 27, 1896	Clark.	July 8, 1900	Ray, A. S.	G, 99th Ind.	Ray, A. E. *
360	Ray, Mary Etta.	Mar. 27, 1894	Clark.	July 8, 1900	Ray, A. S.	G, 99th Ind.	Ray, A. E. *
361	Ray, Cora M.	May 11, 1892	Clark.	July 8, 1900	Ray, A. S.	G, 99th Ind.	Ray, A. E. *
362	Ream, Harry.	Nov. 22, 1891	Cass.	Oct. 3, 1901	Ream, L. *	A, 130th Ind.	Ream, A. E.
363	Radabaugh, Louisa L.	Nov. 22, 1894	Wabash.	Aug. 18, 1902	Radabaugh, Beni. A. *	— 32d Ohio	Radabaugh, Leota.
364	Radabaugh, Wm. Allen.	May 12, 1896	Wabash.	Aug. 18, 1902	Radabaugh, Beni. A. *	— 32d Ohio	Radabaugh, Leota.
365	Radabaugh, Claud Dean.	Apr. 29, 1898	Wabash.	Aug. 18, 1902	Radabaugh, Beni. A. *	C, 58th Ind.	Greer, Ita B.
366	Ross, Melvin.	Nov. 27, 1897	Madison.	Dec. 20, 1902	Ross, Joshua. *	C, 58th Ind.	Greer, Ita B.
367	Ross, Shirley O.	Oct. 26, 1893	Madison.	Dec. 20, 1902	Ross, Joshua. *	C, 58th Ind.	Greer, Ita B.
368	Ross, Grover D.	Jan. 9, 1893	Madison.	Dec. 20, 1902	Ross, Joshua. *	C, 58th Ind.	Greer, Ita B.
369	Reynolds, Cora L.	July 26, 1892	Decatur.	July 6, 1903	Reynolds, Geo. W. *	E, 1st Ohio.	Ewing, I. M.
370	Reynolds, Edith F.	Feb. 3, 1895	Decatur.	July 6, 1903	Reynolds, Geo. W. *	E, 1st Ohio.	Ewing, I. M.
371	Rude, Hazel E.	July 27, 1892	Gibson.	Mar. 31, 1904	Rude, John J. *	G, 67th Ind.	Brooks, Rebecca. *
372	Robb, Roy M.	Aug. 12, 1892	Gibson.	July 8, 1904	Robb, Thos. J.	F, 67th Ind.	Robb, Little. *
373	Reading, Elizabeth.	Dec. 28, 1892	Blackford.	Aug. 11, 1905	Reading, George.	K, 16th Ind.	Carter Rosa.
374	Reading, Wm. Andrew.	Jan. 4, 1895	Blackford.	Aug. 11, 1905	Reading, George.	K, 16th Ind.	Carter Rosa.
375	Redding, Sherman A.	Feb. 21, 1899	Blackford.	Aug. 11, 1905	Redding, George.	K, 16th Ind.	Carter Rosa.
376	Redding, Minnie.	Feb. 15, 1897	Blackford.	Jan. 25, 1896	Redding, George.	K, 16th Ind.	Raines, Rosa.
377	Ruby, Hannah.	Nov. 23, 1891	Marion.	Apr. 10, 1896	Ruby, James M. *	1st Ohio Battery	Lamb, Amanda J.

*Dead

Descriptive Roll of Children—Continued.

No.	Name of Child.	Date of Birth.	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Name of Mother.
378	Raible, Ruth.....	Oct. 1, 1898	Marion.....	May 9, 1907	Raible, Joseph.....	A, 32d Ind.....	Pickle, Matilda.*
379	Raible, Victor.....	Jan. 12, 1895	Marion.....	May 9, 1907	Raible, Joseph.....	A, 32d Ind.....	Pickle, Matilda.*
380	Raible, Gertrude.....	Oct. 20, 1893	Marion.....	May 9, 1907	Raible, Joseph.....	A, 32d Ind.....	Pickle, Matilda.*
381	Seal, Roxie.....	Mar. 6, 1891	Franklin.....	July 4, 1896	Seal, I. T.*.....	G, 39th Ohio.....	Seal, A.
382	Seal, Walter.....	Feb. 1, 1893	Franklin.....	July 4, 1896	Seal, I. T.*.....	G, 39th Ohio.....	Seal, A.
383	Smart, Z. Taylor.....	Feb. 8, 1895	Warren.....	Jan. 8, 1898	Smart, Z.*.....	K, 16th Ind.....	Smart, J. J.*
384	Shaw, O. Hazel.....	Jan. 12, 1892	Howard.....	Oct. 7, 1898	Shaw, J. L.....	G, 86th Ind.....	Shaw, L. A.
385	Shaw, Cassy.....	Sept. 16, 1895	Madison.....	Sept. 28, 1900	Shaw, J. L.....	G, 86th Ind.....	Shaw, L. A.
386	Shultz, Paul.....	June —, 1896	Pulaski.....	Jan. 21, 1899	Shultz, J.*.....	G, 46th Ind.....	Shultz, C.
387	Shultz, S. Etta.....	Sept. 16, 1891	Pulaski.....	Jan. 12, 1899	Shultz, J.*.....	G, 46th Ind.....	Shultz, C.
388	Smith, Cora L.....	Nov. 5, 1896	Warren.....	July 12, 1899	Smith, Jos. L.....	G, 130th Ind.....	Smith, E.*
389	Smith, Ella S.....	Aug. 4, 1892	Putnam.....	Sept. 13, 1899	Smith, Jos. L.....	G, 130th Ind.....	Smith, E.*
390	Steele, Ralph E.....	Jan. 18, 1895	Putnam.....	Sept. 2, 1901	Steele, R. H.*.....	K, 14th Ind.....	Nelson, Mary E.
391	Steele, Robert.....	Jan. 1, 1897	Putnam.....	June 24, 1907	Steele, R. H.*.....	K, 14th Ind.....	Nelson, Mary E.
392	Schofield, Wm. M.....	June 12, 1890	Marion.....	Sept. 11, 1900	Schofield, J. D.....	K, 143d Ill.....	Schofield, L. B.*
393	Schofield, Bethel E.....	July 6, 1890	Marion.....	Sept. 11, 1900	Schofield, J. D.....	K, 143d Ill.....	Schofield, L. B.*
394	Shaw, Hartie S.....	Nov. 29, 1893	Madison.....	Dec. 1, 1901	Shaw, J. R.*.....	—, 16th Ind. Bat.....	Shaw, M. J.
395	Shaw, Edna M.....	May 9, 1895	Madison.....	Dec. 1, 1901	Shaw, J. R.*.....	—, 16th Ind. Bat.....	Shaw, M. J.
396	Sanders, Earl H.....	Apr. 29, 1896	Wayne.....	July 4, 1901	Sanders, Herman*.....	G, 21st N. Y.....	Sanders, L. M.
397	Sanders, Carl H.....	Apr. 29, 1896	Wayne.....	July 4, 1901	Sanders, Herman*.....	G, 21st N. Y.....	Sanders, L. M.
398	Schramm, Wm. A.....	Jan. 3, 1893	Allen.....	Dec. 4, 1900	Schramm, Philip.....	A, 30th Ind.....	Schramm, M. A.
399	Swindle, Walter D.....	Aug. 5, 1897	Putnam.....	July 22, 1901	Swindle, Elijah*.....	H, 5th Ky. Cav.....	Swindle, R.
400	Scott, Charles S.....	Mar. 1, 1896	Grant.....	May 12, 1902	Scott, Jesse A.....	G, 153d Ind.....	Scott, E. A.
401	Saltzman, Pearl M.....	July 26, 1894	Warren.....	May 29, 1902	Saltzman, P.*.....	E, 37th Ky.....	Farrar, A.
402	Saltzman, Jesse P.....	Feb. 21, 1896	Warren.....	May 29, 1902	Saltzman, P.*.....	E, 37th Ky.....	Farrar, A.
403	Saltzman, James J.....	May 25, 1898	Tippecanoe.....	Sept. 4, 1903	Saltzman, P.*.....	E, 37th Ky.....	Farrar, A.
404	Staley, Florence.....	Mar. 7, 1892	Miami.....	Sept. 4, 1903	Staley, Lewis B.....	U. S. Navy.....	Staley, M. Z.
405	Smith, Geo. M.....	May 5, 1893	Allen.....	Sept. 25, 1902	Smith, Josiah.....	C, 47th Ind.....	Smith, Sarah J.
406	Suiter, Jesse.....	June 18, 1894	Johnson.....	Sept. 26, 1902	Suiter, James.....	E, 26th Ind.....	Suiter, Susan.
407	Sowers, Della M.....	Oct. 26, 1895	Fountain.....	Sept. 3, 1903	Sowers, Jas. M.*.....	C, 154th Ind.....	Sowers, Minnie.
408	Sowers, Bertha A.....	Jan. 18, 1895	Fountain.....	Sept. 3, 1903	Sowers, Jas. M.*.....	C, 154th Ind.....	Sowers, Minnie.
409	Stewart, Arthur L.....	Sept. 25, 1895	Madison.....	Jan. 16, 1904	Stewart, John*.....	E, 8th Ind. Cav.....	Stewart, S. E.
410	Shackelford, Berenice.....	Dec. 26, 1895	Orange.....	Jan. 16, 1904	Shackelford, J. M.*.....	F, 8th Ky. Cav.....	Denny, Clara L.
411	Slater, Rilla.....	May 18, 1900	Laporte.....	Jan. 18, 1904	Slater, Delos.....	C, 128th Ind.....	Slater, Clara L.
412	Slater, Rollo.....	Aug. 15, 1902	Laporte.....	Jan. 18, 1904	Slater, Delos.....	C, 128th Ind.....	Slater, Eva.*
413	Scott, Ollie W.....	Sept. 12, 1896	Hamilton.....	Aug. 19, 1904	Scott, R. Edward.....	I, 155th Ind.....	Scott, Mary E.*
414	Scott, Etta O.....	Sept. 4, 1899	Hamilton.....	Aug. 19, 1904	Scott, R. Edward.....	I, 155th Ind.....	Scott, Mary E.*
415	Shindollar, Carl.....	July 7, 1903	Wayne.....	July 17, 1905	Shindollar, Samuel M.*.....	H, 147th Ohio.....	Shindollar, Belle.*

417	Shindollar, Charles.	Jan. 2, 1900	Jan. 17, 1905	Shindollar, Samuel M.*	H, 147th Ohio.	Shindollar, Belle.*
418	Shindollar, Gladys.	Mar. 11, 1898	July 17, 1905	Shindollar, Samuel M.*	H, 147th Ohio.	Shindollar, Belle.*
419	Shindollar, Nora Marie.	July 2, 1896	July 17, 1905	Shindollar, Samuel M.*	H, 147th Ohio.	Shindollar, Belle.*
420	Snyder, Lawrence.	July 28, 1891	Aug. 31, 1905	Snyder, James*	A, 31st N. J.	Snyder, Ella.*
421	Stich, Wm. A.	May 4, 1892	Oct. 7, 1905	Stich, Geo. W.*	D, 75th Ind.	Stich, Eudora.*
422	Smith, Floyd F.	Aug. 3, 1895	Dec. 19, 1905	Smith, Noah*	H, 155th Ind.	Holloway, Harriet.*
423	Snitter, Verna M.	Apr. 27, 1894	Dec. 27, 1905	Snider, John R.	D, 88th Ind.	Butler, Clara A.*
424	Suttles, Frank.	June 26, 1896	Feb. 14, 1906	Suttles, Wyatt*	224 Ind. Bat.	Kirby, Mary.
425	Suttles, Andrew J.	June 21, 1893	Feb. 14, 1906	Suttles, Wyatt*	224 Ind. Bat.	Kirby, Mary.
426	Suttles, Grover	May 2, 1895	Feb. 14, 1906	Suttles, Wyatt*	224 Ind. Bat.	Kirby, Mary.
427	Sparks, Claude R.	Mar. 16, 1898	May 14, 1906	Sparks, Franklin J.	G, 40th Ky.	Dairymple, Susan.*
428	Strain, Thomas.	Jan. 30, 1897	May 14, 1906	Strain, James*	I, 53d Ind.	Nail, Nancy J.*
429	Strain, Rachel.	Apr. 19, 1895	May 14, 1906	Strain, James*	I, 53d Ind.	Nail, Nancy J.*
430	Strain, Dovey	Dec. 4, 1892	Nov. 6, 1906	Sherman, Edward	C, 42d Ill.	Pigg, Mary.
431	Sherman, Robert.	Apr. 4, 1902	Nov. 6, 1906	Sherman, Edward	C, 42d Ill.	Pigg, Mary.
432	Sherman, Mary	Apr. 4, 1902	Nov. 6, 1906	Sherman, Edward	C, 42d Ill.	Pigg, Mary.
433	Sherman, Wm. T.	May 5, 1899	Nov. 6, 1906	Sherman, Edward	C, 42d Ill.	Pigg, Mary.
434	Sherman, Edna	May 5, 1896	Nov. 6, 1906	Sherman, Edward	C, 42d Ill.	Pigg, Mary.
435	Sherman, Mamie	Oct. 27, 1893	Nov. 6, 1906	Sherman, Daniel	C, 42d Ill.	Pigg, Mary.
436	Shaffer, Chance.	Jan. 2, 1895	Jan. 15, 1907	Shaffer, Daniel	M, 90th Ind.	Saltsgrver, Ella.
437	Titus, Russell.	Feb. 1, 1892	Jan. 12, 1899	Titus, J. S.	C, 57th Ind.	Titus, M. E.
438	Thompson, Frank D.	Mar. 21, 1893	July 3, 1900	Thompson, J. F.*	67th Ind.	Thompson, R.
439	Thompson, Charles	May 29, 1891	July 3, 1900	Thompson, J. F.*	67th Ind.	Thompson, R.
440	Thomton, Laura A.	Dec. 23, 1892	July 24, 1900	Thomton, J. H.	G, 8th Ind.	Thomton, J.
441	Trowbridge, Geo. W.	June 25, 1891	Feb. 9, 1901	Trowbridge, Geo. W.*	G, 94th Ind.	Trowbridge, R. E.*
442	Tingle, Minnie M.	Sept. 4, 1892	Nov. 6, 1902	Tingle, Joseph	M, 3d Ind. Cav.	Tingle, L.*
443	Taylor, Calvin A.	Aug. —, 1893	Jan. 10, 1906	Taylor, John H.	124th Ind.	—, Lottie B.
444	Taylor, Pansy A.	Oct. 15, 1895	Jan. 10, 1906	Taylor, John H.	124th Ind.	—, Lottie B.
445	Telford, C. Delight.	Aug. 13, 1900	Jan. 23, 1907	Telford, Samuel	13th Penn. Cav.	Rudduck, Maggie.
446	Wagoner, John	Mar. 29, 1891	Oct. 8, 1903	Wagoner, O. P.	F, 6th Ky.	Wagoner, M.*
447	Wiers, Daniel	Nov. 3, 1892	Jan. 9, 1897	Wiers, L.*	K, 84th Ind.	Wiers, A. T.
448	Whiteford, Daisy Dean	July 11, 1891	Jan. 18, 1897	Whiteford, T.*	K, 26th Ind.	Whiteford, M.
449	Weston, Esther M.	Aug. 3, 1893	July 13, 1899	Weston, J.	H, 6th Minn.	Weston, J.
450	Weaver, Vins	Sept. 28, 1891	July 13, 1899	Weaver, J.*	H, 33d Ind.	Weaver, A.
451	Welsh, James D.	Dec. 12, 1892	July 19, 1901	Welsh, N. C.	F, 66th Ohio.	Welsh, N. E.*
452	Watson, Grace J.	Oct. 22, 1893	Jan. 18, 1901	Watson, H. B.	C, 152d Ind.	Watson, F.*
453	Watson, Mary	May 30, 1893	Oct. 18, 1902	Watson, Wm. A.*	F, 52d Ind.	Whiten, H. J.
454	Watson, Erre A.	May 11, 1894	May 1, 1902	Whitworth, John*	C, 104th Ohio.	Whiten, H. J.
455	Watson, Fred W.	Apr. 2, 1894	May 19, 1902	Watson, Wm.	H, 120th Ind.	Loveze, L. R.
456	Wyer, Hazel G.	Jan. 30, 1896	May 20, 1902	Wyer, Emanuel	C, 75th Ind.	Wyer, M. E.*
457	Wyer, Mamie E.	Feb. 7, 1896	May 20, 1902	Wyer, Emanuel	C, 75th Ind.	Wyer, M. E.*
458	Wyer, Minnie F.	June 14, 1897	May 20, 1902	Wyer, Emanuel	C, 75th Ind.	Wyer, M. E.*
459	Wyer, Emanuel A.	Sept. 24, 1899	May 21, 1902	Wilson, John B.	E, 9th Ind.	Wilson, M.
460	Wilson, Ada Anna.	Feb. 28, 1896	May 21, 1902	Wirt, Wm.	B, 120th Ind.	Wirt, Maggie.*
461	Wert, Edward	July 29, 1892	Jan. 27, 1903	Wert, Wm.	B, 120th Ind.	Wert, Maggie.*
462	Wert, George.	Sept. 29, 1896	Jan. 27, 1903	Wert, Wm.	B, 120th Ind.	Wert, Maggie.*

*Dead.

Descriptive Roll of Children—Continued.

No.	Name of Child.	Date of Birth	County.	Date of Admission.	Name of Father.	Company and Regiment in Which He Served.	Name of Mother.
453	Wert, William.....	Aug. 17, 1899	Grant.....	Jan. 27, 1903	Wert, Wm.....	B, 120th Ind.....	Wert, Maggie.*
464	Weatherford, Joseph F.....	Dec. 10, 1892	Posey.....	Aug. 12, 1903	Weatherford, J. L.....	K, 144th Ind.....	Weatherford, A. E.*
465	Weatherford, Henry L.....	Jan. 14, 1896	Posey.....	Aug. 12, 1903	Weatherford, J. L.....	K, 144th Ind.....	Weatherford, A. E.*
466	Whiteman, Paul D.....	Jan. 3, 1900	Tippecanoe.....	Feb. 20, 1905	Whiteman, John.....	10th Ind. L. A.....	Whiteman, E. A.*
467	Whiteman, Alvin H.....	Dec. 12, 1897	Tippecanoe.....	Feb. 20, 1905	Whiteman, John.....	10th Ind. L. A.....	Whiteman, E. A.*
468	Wilson, McKinley.....	Aug. 25, 1894	Marion.....	June 7, 1905	Wilson, James.....	M, 8th Ind.....	Wilson, Louise I.
469	Williamson, Alvan R.....	Nov. 23, 1891	Madison.....	Oct. 9, 1906	Williamson, Stephen R.....	K, 16th Ind.....	Jacobs, Margaret.*
470	Whitehall, Lee B.....	July 18, 1893	Fountain.....	Oct. 24, 1906	Whitehall, Alexander.....	60th Ind.....	Baxter, Elizabeth
471	Waite, M. Beulah.....	May 4, 1904	Lake.....	June 5, 1907	Waite, Claude M.....	L, 157th Ind.....	Boudreau, Josephine.*
472	Waite, Florence C.....	July 20, 1902	Lake.....	June 5, 1907	Waite, Claude M.....	L, 157th Ind.....	Boudreau, Josephine.*
473	Waite, Cecil.....	July 29, 1900	Lake.....	June 5, 1907	Waite, Claude M.....	L, 157th Ind.....	Boudreau, Josephine.*

*Dead.

TWENTY-NINTH ANNUAL REPORT

OF THE

Indiana School for Feeble- Minded Youth

FORT WAYNE, INDIANA

For the Fiscal Year Ending September 30
1907

TO THE GOVERNOR

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING

1908

STATE OF INDIANA,
EXECUTIVE DEPARTMENT, }
INDIANAPOLIS, December 12, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE, }
INDIANAPOLIS, December 28, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

December 28, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, December 28, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer January 2, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.



BOARD OF TRUSTEES.

JAMES W. SALE, President, Bluffton.
ALBERT P. SINCLAIR, Vice-President, Cloverdale.
EDWARD M. WILSON, Treasurer, Fort Wayne.
MRS. MARY ROWAN HARPER, Secretary, Fort Wayne.

OFFICERS.

ALBERT E. CARROLL, Superintendent.
NORA GRIFFIN, Matron.

MEDICAL DEPARTMENT.

CHARLES C. BEALL, M. D., Resident Physician.
HAROLD K. MOUSER, M. D., Medical Interne.

MEDICAL CONSULTING STAFF.

Surgery.

MILES F. PORTER, A. M., M. D.

Internal Medicine.

B. VAN SWERINGEN, M. D.

Eye, Ear, Nose and Throat.

KENT K. WHEELLOCK, M. D.

ACCOUNTING DEPARTMENT.

MELVIN DRUCKEMILLER, Chief Clerk.
LEONE P. MARSH, Stenographer.
CARRIE GRIFFITH, Night Clerk.
MARGARET TOWNSEND, Record Clerk.
FRANK W. JOHNSON, Storekeeper.
FRANK ANGLIN, Storekeeper's Clerk.

SCHOOL DEPARTMENT.

CYRUS D. MEAD, Principal.
HELEN HUTCHINSON, Kindergarten.
MILDRED H. WINCH, Kindergarten and Primary.
MRS. MARTHA KIMBLE, Primary.
ROSALIE DECKER, Primary.
GRACE EWART, Primary and Intermediate.
MRS. ALICE SUMMERBELL, Primary and Intermediate.

GRACE THOMPSON, Intermediate and Grammar Grade.
 MARY WINTERMOTE, Art and Grammar Grade.
 BERENICE WARREN, Needle and Lace.
 ELIZABETH A. ELLIS, Sloyd and Clay Modeling.
 ANNA AUTEN, Physical Training.
 EMMA JACKLEY, Piano and Voice.
 GEORGIA VON EBERHART, Girls' Orchestra.
 G. J. THOMPSON, Boys' Band.

HEADS OF DEPARTMENTS.

WILLIAM J. SMITH, Supervisor Colony Farm.
 HARRY THOMPSON, Supervisor East Wing Boys' Ward.
 MRS. B. McCONAHY, Supervisoress West Wing Girls' Ward.
 ELLA McCORMICK, Supervisoress Custodial Cottage for Girls.
 BELLA MACTAVISH, Supervisoress Cottage for Adult Females.
 FRANCES THOMPSON, Head Nurse.
 LEW DEHAVEN, Chief Engineer.
 WILLIAM JUERGENS, Woodworking.
 WILLIAM MERTZ, Painting.
 HENRY MEURER, Mattress Making.
 FRED KOENIG, Tailoring.
 JOHN A. MILLER, Shoemaking.
 ANDREW HEINZLEMAN, Bakery.
 P. J. BOUILLON, Cold Storage.
 JOHN DICKSON, Farm and Dairy.
 MORRIS PULLIN, Gardener.
 FRANK WILHELMS, Florist.
 D. F. OPDYKE, Outside Overseer.
 KITTIE HARGRAVE, Laundry.
 MRS. F. W. JOHNSON, Dressmaking.
 SUSIE CHAPPELL, Mending and Comfort.
 AUGUSTA HOPKINS, Sewing Room, Cottage for Adult Females.
 MRS. M. McLAUGHLIN, Sewing Room, Colony Farm.

REPORT OF BOARD OF TRUSTEES.

To the HONORABLE J. FRANK HANLY, Governor of Indiana:

Sir—The Board of Trustees for the Indiana School for Feeble-Minded Youth respectfully submits its twenty-ninth annual report for the fiscal year ending September 30, 1907, together with a detailed report from the Superintendent, including various statistical exhibits covering the financial operations of the institution for the year.

Under an act of the sixty-fifth session of the General Assembly, the membership of our Board was increased from three to four, and acting under such authority, you appointed Mr. Albert P. Sinclair of Cloverdale, Putnam County, a trustee to serve for four years from May 6, 1907. The term of Mr. James W. Sale as a member of this Board having expired on March 10, 1907, you reappointed him for a term of four years from May 6, 1907.

At our regular meeting in May, the Board was reorganized as follows: James W. Sale, President; Albert P. Sinclair, Vice-President; Mary R. Harper, Secretary, and Edward M. Wilson, Treasurer. No changes in the executive force have been found necessary during the year. The Superintendent has made commendable progress along many lines, and has under his authority an excellent corps of assistants who co-operate with and support him in his arduous duties. The population and actual attendance of inmates follows closely that of last year. The death rate is slightly increased but is still very low, being 2.65 per cent of the population. The children have been healthy and well kept throughout the year. There is an air of contentment and cheerful compliance with the rules of the institution, alike among employes and inmates, that is gratifying to the Board.

The Superintendent's report shows that the full capacity of the institution has been utilized throughout the year,

while numbers of urgent applications, both children and adults, have been compelled to wait for room, which could only be made available by death or withdrawal. The Custodial Cottage for Boys, under construction at the time of our last report, was fully completed during the summer, but is not yet available for use as intended, for the reason that, on account of additions and repairs being made on the Custodial Cottage for Girls, as authorized by the last Legislature, it was necessary to temporarily house the inmates of that building in the boys' new cottage. We hope to have this work completed by January next, after which we will be able to care for all the male applicants now waiting. We can not, however, hope to care for all female applications, neither children nor adults, with our present capacity. Our repair fund has been well expended during the past year and the physical condition and appearance of the buildings have been much improved.

The addition of 160 acres of excellent farm land to our property during the past year will be a valuable asset to the institution, as it will enable us to extend our farm operations in a way that will undoubtedly be profitable to the State. This was the only specific appropriation made by the last General Assembly that was available during the fiscal year.

The steady growth of the institution has naturally increased the detail work of the Board, making it impossible to properly discharge our duties with a single meeting each month, so that it has been found advisable to hold two regular meetings each month, with a distinctive order of business for each meeting. This arrangement has proved very satisfactory, giving us opportunity for a thorough consideration of all of our work and more frequent inspections of the various departments of the institution.

A complete statement of the regular and specific appropriations made by the last General Assembly and the disbursement of the same for the period ending September 30, 1907, is as follows:

MAINTENANCE.

Regular appropriation	\$122,000 00	
Excess on 28.162 inmates over 1,000.....	2,450 00	
Expenditures		\$114,283 41
Reverted to State Treasury, 1/12 of appropriation		10,166 67

REPAIR FUND.

Regular appropriation	\$6,000 00	
Expenditures		\$5,500 00
Reverted to State Treasury, 1/12 of appropriation		500 00

CUSTODIAL COTTAGE FOR BOYS.

Appropriation	\$50,000 00	
Expenditures for year ending October 31, 1906....		\$25,608 81
Expenditures for period ending September 30, 1907		24,391 19

ADDITIONAL CUSTODIAL COTTAGE FOR GIRLS.

Appropriation	\$21,000 00	
Expenditures		\$442 75
Amount unexpended		20,557 25

FARM LAND.

Appropriation available for 1907.....	\$13,312 50	
Expenditures		\$13,300 00
Amount unexpended		12 50

TUITION RECEIPTS AND INDUSTRIAL PROCEEDS AND EARNINGS.

Receipts from tuition accounts	\$3,005 83	
Industrial proceeds and earnings	508 34	
Deposited with State		\$3,514 17
	<hr/>	<hr/>
	\$3,514 17	\$3,514 17

We respectfully call your attention to the detailed report of the Superintendent.

Respectfully submitted,

JAMES W. SALE,
ALBERT P. SINCLAIR,
MARY R. HARPER,
EDWARD M. WILSON,
Board of Trustees.

REPORT OF SUPERINTENDENT.

To Board of Trustees:

I have the honor to submit herewith the twenty-ninth annual report of the Indiana School for Feeble-Minded Youth for the period ending September 30, 1907:

MOVEMENT OF POPULATION.

	Boys.	Girls.	Adult Fe- males.	Total.
Enrolled October 31, 1906.....	465	437	133	1,035
Admitted during the fiscal year.....	37	21	9	67
Total enrollment	502	458	142	1,102
Died during the fiscal year	16	9	2	27
Discharged during the fiscal year	4	4	1	9
Withdrawn during the fiscal year.....	23	10	..	33
Total died, discharged and withdrawn..	43	23	3	69
Enrollment September 30, 1907	459	435	139	1,033
Actual number present September 30, 1907.....	458	435	139	1,032
	Males.	Females.		Total.
Daily average actually present	453.240	566.035		1,019.276

	Boys.	Girls.	Adult Fe- males.	Total.
Applications presented	45	39	23	107
Applications accepted pending room	35	33	22	90
Applications deferred	2	4	..	6
Applications rejected	8	2	1	11
Applications completed not acted upon.....	1	4	..	5
Total applications accepted on file pending room	9	33	21	63

Of 107 applications presented for consideration, 90 were accepted pending room, action was deferred on 6, and 11 were rejected. Completed applications on file to be presented at the next regular meeting of the Board are boys, 1; girls, 4; adult females, 5; total, 10. Total applications on file, accepted pending room, are: boys, 9; girls, 33; adult females, 21; total, 63. Four boys were discharged, one as insane and 3 to the care of parents or relatives. Four girls

were discharged, 3 as insane and one to the care of parents. One adult female was discharged to the care of parents, the petition for withdrawal being signed and approved by the judge of the circuit court of the county from whence she came. Of the 33 children withdrawn by the parent or legal guardian, 22 were undoubtedly proper subjects for the institution and should have had the care and protection of the State for the remainder of their lives. I would suggest the establishment of rules or a change in the statutes that would give the Board authority to use their discretion in granting requests for the withdrawal of inmates. A large proportion of the children withdrawn each year belong to a class that will never be self-supporting, even under close supervision, and their return to society is sure to result in acts of violence or indiscretion that will only add an additional burden upon the State. This is especially true as regards the female sex of child-bearing age. If every feeble-minded child was rendered sterile, if the power of reproduction was taken from them, then it would be of little moment to the State whether the individual remained a member of our institutional community or returned to the care of parents or relatives.

Since my last report the Cottage for Custodial Grade Boys has been completed and is now occupied temporarily by 156 girls from "Sunset" Cottage, it being necessary to vacate this building until the additions and changes in the interior are completed. I hope to be able to reoccupy this building by the first of the coming year, at which time the male inmates of the institution will be reclassified, and those belonging to the lower and helpless grades will be transferred to the cottage that has been prepared for them on the east side of the main institution grounds. The removal of these boys from the main building and Colony Farm will give us additional room for from 100 to 125 middle and high-grade boys. The present accommodations for the male sex will be ample to meet all demands made upon the institution within the next ten years, and unless the institution grounds are enlarged we can not attempt to care for a larger number of males than the present buildings will ac-

commodate. There is urgent need for additional accommodations for girls. The female wards in every department are crowded to their utmost capacity and for more than a year we have been compelled to accept all applications for this department "pending room." We have on file now applications for 33 girls and 21 adult females that can not be brought to the institution for want of room.

DISTRIBUTION OF POPULATION.

	Enrolled.	Beds.
Main building—Girls	286	287
Main building—Boys	256	262
Custodial Cottage for Girls	149	157
Cottage for Adult Females	139	126
Cottage, Colony Farm Boys	186	185
Nursery Department Hospital—Boys	17	18
Total	1,033	1,035

OUR SCHOOL DEPARTMENT.

There have been few changes in our school department the past year. Our corps of teachers, with two exceptions, remains the same as recorded in my last report. Prof. Cyrus D. Mead has been reappointed as principal. There has been no increase in the enrollment of this department. We began the year with 400 children attending school. A very complete and interesting report of the work being accomplished by our schools will be found in the principal's report, to which your attention is respectfully directed.

OUR MEDICAL DEPARTMENT.

We are again permitted to report the absence of epidemics, and while our mortality is slightly in excess of that reported last year, the death rate is exceedingly low. The number of deaths for the year was: boys, 16; girls, 9; adult females, 2; total, 27, or 2.65 per cent. Our medical department is seriously hampered in its work for lack of room to properly care for certain classes of hospital cases. The removal of the nursery children from the hospital department to the new building for boys will furnish temporary relief. The management of this department is in charge of

Dr. Chas. G. Beall, our resident physician, whose service has been satisfactory in every particular. Dr. Harold K. Mouser of the class of 1907, Indiana Medical College, was appointed as interne to serve one year. Dr. C. C. Wright of the class of 1907, Indiana Dental College, was appointed as dental interne.

For a complete report of the work in this department, your attention is respectfully directed to the resident physician's report appended hereto.

INDUSTRIES.

Our industries remain the same as reported last year, namely: shoemaking, tailoring, mattressmaking, broom-making, woodworking, carpentering, painting, brickmaking, sewing, mending and comfortmaking, bakery, laundry, gardening, farming and dairy. In addition to these, a large number of children are employed in the various kitchens and dining rooms and in performing domestic duties throughout the institution generally. A detailed report of the work done by the different departments will be found elsewhere.

COLONY FARM.

Our farming operations have averaged with other years. Hay and grass crops were exceedingly good, while oats and corn were injured by the extremely cold weather during the growing season.

An appropriation by our last Legislature has enabled us to add 160 acres of good farm land to our present holdings. This will permit us to place at the colony a larger number of our able-bodied boys, and will enable us to raise a large part of the provender that it has been necessary to purchase from our neighbors in the past years.

STOCK INVENTORY, COLONY FARM.

Milk cows	52
Heifers	13
Heifer calves	11
Calves for veal	4
Bulls	2

Fat hogs and shoats	133
Weaned pigs	45
Brood sows	27
Suckling pigs	83
Boars	3
Sheep	2
Work horses	17
Colts, three-year-old	3
Colts, two-year-old	1
Colts, one-year-old	2
Colts, weanlings	2

RELIGIOUS EXERCISES.

Chapel services are held each Sabbath in the main auditorium, as well as in the different detached cottages. All special days are observed with appropriate services.

RECREATION AND AMUSEMENTS.

The playgrounds should be an important feature of every institution. We are ever on the lookout for something new to keep the child actively engaged while on the playgrounds.

Our camp at colony was opened as usual this year and most of our children were given a vacation of a few days in the woods.

MAINTENANCE.

I am glad to report that it has been possible to close the fiscal year without a deficit. Our maintenance appropriation for the past year was \$122,000.00, based upon an actual attendance of 1,000 inmates, with an excess allowance of \$116.00 per capita per annum for each inmate over that number. The excess maintenance for the year amounted to \$2,450.08, making our total maintenance for the year, \$124,450.08, less \$10,166.67 deducted from our appropriation on account of the change in the fiscal year. The expenditures for all purposes except repairs and improvements was \$114,283.41.

REPAIRS.

The buildings and all permanent fixtures have been kept in good repair.

SPECIFIC APPROPRIATIONS.

The Custodial Cottage for Boys has been completed and occupied since July of the present year. This building is being used temporarily by girls from the Girls' Custodial Cottage while their building is undergoing repairs. They will be removed, however, within a few weeks and the building occupied by boys as was originally contemplated.

CHANGES IN ADMINISTRATION.

Miss Nora Griffin, who was appointed Acting Matron on September 15, 1906, was appointed Matron January 1, 1907.

Mr. Melvin Druckemiller, who had charge of our storehouse for several years, was made Chief Clerk, January 1, 1907.

IN CONCLUSION.

It is a pleasure to again record my appreciation for the valuable assistance rendered by the officers and employes of every grade. If success has attended our efforts in any degree, it has been achieved through the hearty co-operation of a faithful and loyal corps of able assistants.

And to you as a Board I tender sincere thanks for the support you have so generously given me in the performance of my many duties.

Respectfully submitted,

ALBERT E. CARROLL,
Superintendent.

REPORT OF SCHOOL PRINCIPAL.

To the Superintendent:

The School Department respectfully submits its annual report for the period ending September 30, 1907. More pupils have had instruction in manual occupation, in addition to their regular school studies, than at any time in the past. This is true of about two-thirds of the entire number, the other third being children too small or those who have attempted and failed. The different kinds of industrial work in the shops and departments of the institution at large employ many more. Our school term consisted of nine months without the loss of a single day. The attendance was regular and ample material was provided. Our enrollment again averages 400.

GENERAL SCHOOL WORK.

Each child comes to school one-half day, working the other half. "The greatest good to the greatest number" is our effort; the weaker ones not unduly pushed aside by the stronger. The harmonious training of the complete self is not only a possibility with us, but an accomplished fact. The education of today develops uniformly the intellectual, the physical and the emotional; simply stated, the head, the hand, and the heart. The three Rs have not been supplanted by the three Hs; they have been vitalized. Facts have not given way to sentiment, "seeing" and "feeling" have breathed the breath of life into the school room. The eye may place the picture, the ear may be directed toward the harmony, the sense organ of the brain may locate and may know, but the heart "sees," and the heart "feels," and a heart can not be feeble-minded. For this reason our instruction is not wholly didactic. If we have a weak will to appeal to, it does not follow that the emotions are equally as infirm.

The observation of and mingling with nature, so successful the past two years, the teaching of the school room, the influence of the chapel service, the harmony and melody of the various kinds of music pervading the furthest corners of the institution life, have combated the spirit of cruelty and selfishness until a love for the natural has shown that other things live, that other beings have rights, that other people have sorrows and trials. The pennies so freely given by the children to the San Francisco sufferers and the Salvation Army Christmas charities will come back to us as gold. The lesson of each child making a present at Christmas time with his own hands, and personally giving it to the one he wished, can not be reckoned in the material.

Aside from the mechanical phase of the manual in general, and the physical work is in close relation, concentration and will are ever aimed at by the instructors. Weakness in this respect is a characteristic of the feeble-minded. But a movement of the hand presupposes some co-ordination, but in varied degrees. The mind in a way is driving and directing its tool. The better it directs, the more definite the act, and vice versa, the repetition of a rational move by the hand strengthens the will. It is complementary, retroactive. Two units are placed together. The result is seen and felt. The very power acquired by this tangible effort, the very interest aroused, help him place two intangible units, in his mind, with two others and comprehend his four. The value of manual work, then, is felt in every class room and in every study. From the more theoretical above, let us consider the more practical side of our daily instruction and see in what manner the "head and hand and heart" are touched.

SCHOOL DEPARTMENTS.

THE HEAD.

Under the "head training" would fall the kindergarten, kindergarten primary, primary, and grade. This classification most strictly can not be arbitrary, but for convenience we arrange it so, for woven in with the above will be a hand and heart training also.

The two kindergartens follow the Froebellian method with its gifts, occupations, stories, songs, games, and marches. There is the sense training through action, creation, and imitation which brings the child into contact with life, allowing him to interpret it in imagination and action, and to enter his world more conscious of himself and his powers. He can play himself tired with work and work himself tired with play. The atmosphere of the home pervades. He looks after his own bower or plants his own vegetable. Lunches are served over his own linen and china, his own table provided with products of his own window garden.

The two kindergarten primary rooms mark the transition into the primer. The pupil forms his letters with the free arm movement at the blackboard, sounds them phonetically, and combines them into his word. By the phonic, word, or sentence method he is induced to read. An action primer augments the regular one. Simple combinations in numbers are practiced. Action is utilized to the fullest and the environment of the immediate grounds drawn upon.

The boys and girls are divided upon entering the different primary rooms. From the first to the third inclusive, we have nine schools. Following these come an advanced boys' grade to the seventh and a girls' to the eighth. Reading, writing, arithmetic, nature, grammar, physiology, geography, and history are offered according to a daily program. Nature work is dominant. In all texts the regular Indiana series is supplemented by others.

THE HAND.

The "hand" is seen in mechanical drawing, sloyd, bench, clay modeling, fancy needlework, drawing and art, and physical training. Of course the head and heart are also manifest.

The first lessons in sloyd are preceded by simple drawings, with pencil and try square, which the boy follows from the teacher's drawing on the board. She proceeds from the simple to the complex, from the modeling stick or plain cross to the jewel box or taboret. If the pupil is apt, pro-

motion to the bench follows, where the use of the tools is taught. From the halved or miter joint, his muscular activity, through concentration, finally expresses itself in a picture frame, bird box, or book stand. "Truth and growth" are underlying in sloyd work. We try to remove a bad habit by implanting a good one.

The girl enters the modeling room and works in clay from the natural flower, fruit, and animal form, to casts of heads and busts. The pottery work has had a very successful beginning. Fancy needlework alone enrolls over eighty girls in drawn, eyelet, lace, and Hardanger work, hemstitched and monogrammed linen, cut work, Hedebo, Montmellick, cross-stitch, and shadow embroidery. Flower pot covers and hanging baskets are made from reed and raffia. Natural sedges, rushes, and willow withes will also be gathered by the classes and woven into rustic baskets, the frames being put together by the bench boys.

Drawing and art reaches the emotional through the hand. New beauty is seen in the common objects. From the blossom to the seed pod, color is washed or penciled. Trees in their seasons are studied, buildings are placed in perspective, the bird and her nest are outlined and colored. Life and action are sketched, the antique and still life drawn upon, motives, based on nature forms are designed into booklet covers. Oil as a medium has been used. Models in costume pose for the interpretation of character in literature and history.

Regular physical and gymnastic work, in a well equipped gymnasium, reaches every child in school and closes our chapter on "hand" or muscular training. Special endeavor is toward the hands, feet, facial and neck muscles: the hand, for prehensile power, that better writing may result; the foot, for combating the shuffling gait; the facial muscle, for better articulation and speech. We have added several new pieces of apparatus, such as mats, basket balls, flying rings, climbing ropes and poles, an adjustable ladder, balancing beams, a vaulting buck, and vaulting horse. New interest is infused by the introduction of gymnastic dances and games. Hygienic instruction, with a care to dieting in the

dining rooms, and careful medical supervision as to general health allow us to utilize every avenue through which a deficient child may be reached.

THE HEART.

In all the above, the "heart" has been nourished. Time and again the life and action in nature work has demonstrated this truth. But we now offer the most potent agency. Music is indispensable and has its power even over the degenerate nature. Secular and sacred music is rendered with precision and expression by band, orchestra, piano, part and chorus singing. Selections from Balje and Flotow, Schlepegrell and Strauss, Bach and Schumann are creditably executed. Harmony is contagious and the vibration of the instrument or voice penetrates every fiber of the heart and every corner of the institution, dissipating, at least for a time, the grosser instincts by imparting the refined. Recitals are given annually also for the public.

Regular Sunday chapels are held in the main auditorium and separate cottages. The international Sunday School Lessons are followed. Music is rendered, responses are carried, and the larger part join in general singing.

Relaxation and diversion are furnished. Amusement is provided. The anticipation of the bi-weekly entertainments, in which the children take part, equals the realization. Only the best productions are allowed on the stage and the best books are selected for the children's library. Circuses were attended and camp held. Nutting parties are now being formed. Dances and birthday parties will follow through the winter. Arbor and Bird Day, Flower Day, Harvest Home, Hallowe'en, Christmas, Washington's birthday, and the "Fourth" will be celebrated. Thanksgiving, Easter, and Decoration Day will be appropriately observed. Have we not appealed to the "heart?"

CONCLUSION.

We were gratified in having several special visits the past year from public school teachers and institution officials. Their purpose was to inspect and observe our work. We

were highly complimented by the State Superintendent of Public Instruction accepting several pages of material from the pupils of our school for the 1907-08 "Arbor and Bird Day Annual." We trust it may be a means of arousing more interest in similar work in the public schools.

The children's library has been thoroughly overhauled and reading rooms in the various departments will help us hold what is once accomplished with the child. A museum case for our natural history objects would prove of immense value in our work. Our most urgent need is a new school building. The present one lacks not only modern conveniences but we are compelled, for want of room, to utilize the basement, and rooms separate from the building.

The coming winter will see no especial change in the general policy and course so successfully pursued the past two years. A foundation has been laid by definite accomplishment that insures a splendid winter's work. We strive to make the environment of the school room so attractive that the child feels a privilege and a joy in attending. At all times example and deportment are guarded that the silent influence of association and character may be felt by an imitative child.

I wish to express to you my appreciation and acknowledgment of the work of the teachers and to commend them to you. You can place your confidence in them. The close sympathy in which you stand to their work offers an incentive which makes it impossible for them to fail. They are grateful to you for it.

Respectfully submitted,

CYRUS D. MEAD,
Principal.

SCHOOL ENROLLMENT.

MORNING.

Classes.	Enrollment.
1. Boys' custodial kindergarten	17
2. Boys' custodial 1st primary	15
3. Boys' custodial 1st-2d primary	16
4. Boys' custodial 2d-3d primary	16
5. Girls' custodial kindergarten-primary	17

6. Girls' custodial 1st primary	17
7. Girls' custodial 1st-3d primary	18
8. Girls' drawing and art	27
<hr/>	
Total	143

AFTERNOON.

9. Boys' and Girls' kindergarten	18
10. Boys' and girls' primary-kindergarten	16
11. Boys' 1st-2d primary	17
12. Boys' 3d-6th grade	16
13. Girls' 1st-2d primary	19
14. Girls' 1st-3d primary	14
15. Girls' 2d-3d primary	16
16. Girls' 4th-7th grade	16
<hr/>	
Total	132

MANUAL, MUSIC, AND PHYSICAL CULTURE.

17. Girls' a. m. fancy needlework	34
18. Girls' p. m. fancy needlework	20
19. Harper Lodge fancy needlework	20
20. Harper Lodge physical culture, 1 and 2	58
21. Sunset Sisters and A2 physical culture	24
22. Piano	18
23. Orchestra	12
24. Band	24
25. Boys' sloyd-bench	14
26. Boys' sloyd-knife	27
27. Girls' clay-modeling	24
<hr/>	
Total	285

GRAND TOTAL.

Morning school	143
Afternoon school	132
Manual, music, and physical culture	285
<hr/>	
Total	560
Names counted more than once	160
<hr/>	
Actual number of pupils in daily attendance	400

REPORT OF RESIDENT PHYSICIAN.

Mr. A. E. Carroll, Superintendent:

The following is the report of the Medical Department for the period of eleven months ending September 30, 1907:

The general health has been fair. We have had a small epidemic of mumps. Late last fall we had a number of cases of typhoid fever, the source of which, after a careful investigation, we were unable to discover. The results of the experimental work done in the laboratory during the year will be published later. Our medical library has been increased materially and now consists of 150 volumes. The hospital building has been kept in good repair. We have added a sterilizing apparatus to our operating room equipment.

The removal of the division of young custodial children into the new Custodial Cottage for Boys will give us some of the much-needed room which we asked for in our last report. This addition of room will enable us to take care of our tuberculous and infectious cases in a much more satisfactory manner.

Sixteen autopsies have been held during the period. The dispensary cases have numbered 4,362. The admittances to the hospital have been 667 boys and 607 girls. The death rate for the period of eleven months has been 2.65 per cent.

The members of our consulting staff have been of much service during the year and we are under many obligations to them for their advice and assistance.

Dr. Harold K. Mouser, class of 1907, Indiana Medical College, was appointed interne to serve one year. His work has been conscientious and highly satisfactory in every respect.

Dr. C. C. Wright, class of 1907, Indiana Dental College, was appointed dental surgeon. His duties were performed in a thorough and careful manner.

Below is appended a list of the more important medical and surgical cases, the dentist's statistical report, and the mortality record.

In conclusion, I wish to again express my appreciation and thanks for the support and co-operation which has been accorded me by both the management and hospital corps. This has made our work not only pleasant but efficient.

Respectfully submitted,

CHAS. G. BEALL,
Resident Physician.

MEDICAL AND SURGICAL CASES.

Trachoma	5
Corneal ulcer with prolapse of iris	1
Simple corneal ulcer	4
Iritis	3
Acute otitis media	6
Acute mastoiditis	1
Organic heart disease (broken compensation)	4
Septic endocarditis	1
Pericarditis	2
Pulmonary tuberculosis	11
General miliary tuberculosis	3
Tubercular adenitis	3
Lupus	1
Mesenteric tuberculosis	3
Lobar pneumonia	7
Broncho-pneumonia	2
Pulmonary abscess	1
Bronchial asthma	2
Typhoid fever	9
Acute articular rheumatism	5
Sub-acute articular rheumatism	9
Erysipelas	2
Mumps	17
Chorea	2
Catarrhal jaundice	2
Status epilepticus	8
Acute nephritis	2
Chronic nephritis	3
Urticaria	3
Sycosis of scalp	7
Acute anterior poliomyelitis	1
Stricture of esophagus	1
Follicular tonsillitis	15
Sarcoma of arm	1

Prolapse of anus	3
Cystitis	2
Circumcisions	9
Potts' disease	2
Tubercular knee	2
Sub-lingual abscess	1
Mammary abscess	1
Otitis media (paracentesis)	4
Fracture of phalanges	1
Fracture of radius	4
Fracture of ulna	2
Fracture of clavicle	3
Fracture of nose	2
Removal of adenoids	2
Removal of sebaceous cyst	1
Paracentesis for pleural effusion	2
Vasotomy (double)	1
Amputation of finger	1
Operation for appendicitis	1
Cystotomy (removal of foreign body)	1

REPORT OF DENTAL WORK DONE AT I. S. F. M. Y.—1907.

Mouths examined	993
Mouths cleaned	848
Secondary teeth extracted	206
Primary teeth extracted	69
Roots extracted	109
Amalgam fillings inserted	350
Cement fillings inserted	44
Compound cement and amalgam fillings inserted ..	22
Root fillings inserted	24
Gold fillings inserted	5
Gutta percha fillings inserted	4
Gold crowns fitted	1
Full artificial dentures, vulcanite	2
Partial artificial dentures, vulcanite	2
Artificial dentures repaired	1

NAME.	Age.	Date of Death.	Cause of Death.	Complicating Conditions.
1. Cary Alvin Orwig.....	25	Nov. 3, 1906	Septic endocarditis.....	High grade imbecile.
2. Clara Starks.....	14	Nov. 5, 1906	General miliary tuberculosis.....	Middle grade mongolian imbecile.
3. Alice Spencer.....	26	Nov. 8, 1906	Typhoid fever.....	Middle grade imbecile.
4. Josie Turner.....	17	Nov. 12, 1906	Lobar pneumonia.....	High grade imbecile..
5. Chas. Riggs.....	33	Nov. 19, 1906	Organic heart disease.....	Middle grade imbecile.
6. May Garrett.....	24	Dec. 19, 1906	Status epilepticus.....	Custodial grade epileptic.
7. Floyd O. Clabaugh.....	15	Feb. 2, 1907	Lobar pneumonia.....	Middle grade imbecile.
8. Geo. King.....	19	Feb. 14, 1907	Pulmonary abscess.....	High grade imbecile.
9. Flossie Polk.....	13	Mar. 6, 1907	General miliary tuberculosis.....	Middle grade mongolian imbecile.
10. Robert Weaver.....	18	Mar. 31, 1907	Mesenteric tuberculosis.....	Custodial grade imbecile.
11. Chas. Bradford.....	24	April 25, 1907	Lobar pneumonia.....	Custodial grade epileptic.
12. Madge Hargrave.....	17	April 27, 1907	Pulmonary tuberculosis.....	Custodial grade imbecile.
13. Jas. S. Peck.....	19	May 13, 1907	Status epilepticus.....	Middle grade epileptic.
14. Cora Andres.....	21	June 8, 1907	Pulmonary tuberculosis.....	Custodial grade epileptic.
15. Lilly M. Morehead.....	14	June 11, 1907	Pulmonary tuberculosis.....	Middle grade imbecile.
16. Claud Young.....	18	July 5, 1907	Mesenteric tuberculosis.....	Middle grade imbecile.
17. Addie Williams.....	34	July 12, 1907	Lobar pneumonia.....	Custodial grade epileptic.
18. Ethel Cook.....	25	July 24, 1907	Pulmonary tuberculosis.....	High grade imbecile..
19. John Cunningham.....	23	Aug. 3, 1907	Pulmonary tuberculosis.....	Custodial grade imbecile.
20. Norwood McCoy.....	18	Aug. 4, 1907	Epilepsy.....	Custodial grade epileptic.
21. Raymond White.....	11	Aug. 15, 1907	Stricture of esophagus.....	Custodial grade imbecile.
22. Mary Stewart.....	14	Aug. 15, 1907	Status epilepticus.....	Custodial grade epileptic.
23. Glen Davis.....	19	Aug. 18, 1907	General miliary tuberculosis.....	Middle grade mongolian imbecile.
24. Fred McDonald.....	7	Aug. 19, 1907	Status epilepticus.....	Custodial grade epileptic.
25. Joe Smith.....	14	Sept. 9, 1907	Enterocolitis.....	Custodial grade imbecile.
26. Oral Craft.....	26	Sept. 16, 1907	Mesenteric tuberculosis.....	Custodial grade imbecile.
27. Henry Liberti.....	34	Sept. 24, 1907	Lobar pneumonia.....	Custodial grade imbecile.

TABLE No. 1.

Admitted During the Year.

MONTHS.	Boys.	Girls.	Adult Females.	Total.
November, 1906.....		1		1
December, 1906.....	5	3		8
January, 1907.....	3	3	2	8
February, 1907.....	2	3	1	6
March, 1907.....	1	1		2
April, 1907.....	7	1		8
May, 1907.....	6	1	2	9
June, 1907.....	2	5	1	8
July, 1907.....	8	2		10
August, 1907.....	1	1		1
September, 1907.....	3	1	2	6
Total.....	37	22	8	67

TABLE No. 1—Continued.

Died.

Males.....	16
Females.....	11
Adult Females.....	—
Total.....	27

Withdrawn.

Males.....	23
Females.....	10
Adult Females.....	—
Total.....	33

Discharged.

Males.....	4
Females.....	4
Adult Females.....	1
Total.....	9
Grand Total.....	69

Movement of Population.

	Boys.	Girls.	Adult Females.	Total.
Enrollment, October 31, 1906.....	465	437	133	1,035
Admitted during the fiscal year.....	37	21	9	67
Total enrollment.....	502	458	142	1,102
Died during the fiscal year.....	16	9	2	27
Discharged during the fiscal year.....	4	4	1	9
Withdrawn during the fiscal year.....	23	10	—	33
Total died, discharged and withdrawn.....	43	23	3	69
Enrollment, September 30, 1907.....	459	435	139	1,033
Actual number present, September 30, 1907.....	458	435	139	1,032

TABLE No. 2.

Inmates by Counties.

COUNTIES.	Boys.	Girls.	Adult Females.	Total.	Quota.
Adams.....	4	6		10	11
Allen.....	25	13	11	49	37
Bartholomew.....	10	2	2	14	12
Benton.....	1			1	6
Blackford.....	8	7	2	17	8
Boone.....	3	1	1	5	13
Brown.....	2	2	1	5	5
Carroll.....	6	7		13	10
Cass.....	4	7	3	14	16
Clark.....	2	7		9	15
Clay.....	4	5	1	10	16
Clinton.....	2	4	1	7	13
Crawford.....	1			1	6
Daviess.....	2	2		4	14
Dearborn.....	2			2	11
Decatur.....	4	7	2	13	9
Dekalb.....	6	2		8	12
Delaware.....	8	6	7	21	24
Dubois.....		2		2	10
Elkhart.....	12	8	1	21	21
Fayette.....		2		2	6
Floyd.....	3	5		8	14
Fountain.....	6	10	3	19	10
Franklin.....	1	2		3	8
Fulton.....	2	3	1	6	8
Gibson.....	7	6	1	14	14
Grant.....	6	5	3	14	26
Greene.....	6	3	3	12	14
Hamilton.....	6	8	2	16	14
Hancock.....	3	5		10	9
Harrison.....	3		1	4	10
Hendricks.....	5	10		15	10
Henry.....	8	7	4	19	12
Howard.....	7	6	2	15	14
Huntington.....	4	13		17	14
Jackson.....	6	4	5	15	13
Jasper.....	2	3		5	7
Jay.....	2	2	2	6	13
Jefferson.....	4	5	2	11	11
Jennings.....	1	6		7	8
Johnson.....	2	2	1	5	10
Knox.....	1	4	1	6	16
Kosciusko.....	6	11	4	21	14
Lagrange.....	1	1		2	7
Lake.....	2	1		3	18
Laporte.....	7	7	1	15	18
Lawrence.....	2	1	1	4	12
Madison.....	13	15	4	32	34
Marion.....	36	45	4	85	94
Marshall.....	6	2	2	10	12
Martin.....	3	4	1	8	7
Miami.....	4	5	1	10	14
Monroe.....	1	0	1	2	10
Montgomery.....	11	9	1	21	14
Morgan.....	7	2	1	10	10
Newton.....	1	1		2	5
Noble.....	5	3		8	11
Ohio.....					2
Orange.....	2	5	1	8	8
Owen.....	1	4	3	8	7

TABLE No. 2—Continued.

COUNTIES.	Boys.	Girls.	Adult Females.	Total.	Quota.
Parke.....	3	4		7	11
Perry.....	1			1	9
Pike.....	5	1	1	7	10
Porter.....	2	3	1	6	9
Posey.....	5	1	1	7	11
Pulaski.....	3	3	1	7	7
Putnam.....	1	3	4	8	10
Randolph.....	9	6	1	16	14
Ripley.....	3	2	1	6	10
Rush.....	2	4		6	10
St. Joseph.....	8	9	4	21	28
Scott.....	6	1		7	4
Shelby.....	4	7		11	13
Spencer.....					11
Starke.....	2	3	3	8	5
Steuben.....	5	3	1	9	7
Sullivan.....	4	2	3	9	12
Switzerland.....	2	2	2	6	6
Tippecanoe.....	13	6	1	20	18
Tipton.....	1			1	9
Union.....	1	1		2	3
Vanderburgh.....	22	10	6	38	34
Vermillion.....	3	2	1	6	7
Vigo.....	14	17	4	35	30
Wabash.....	10	4	1	15	13
Warren.....	1	1	1	3	5
Warrick.....	3	6	1	10	11
Washington.....	4	4		8	9
Wayne.....	10	4	9	23	19
Wells.....	5	9	1	15	11
White.....	4	1		5	9
Whitley.....	4	1	1	6	8
Grand Total.....	459	435	139	1,033	....

TABLE No. 3.

Applications Made by Counties During the Fiscal Year.

COUNTIES.	Boys.	Girls.	Adult Females.	Total.
Adams.....	2			2
Allen.....	3		3	6
Bartholomew.....	1			1
Benton.....		1		1
Blackford.....	1	3		4
Boone.....	1			1
Brown.....				
Carroll.....	1			1
Cass.....				
Clark.....	1	1		2
Clay.....				
Clinton.....	1			1
Crawford.....				
Daviess.....				
Dearborn.....				
Decatur.....		1		1
Dekalb.....				
Delaware.....	1			1
Dubois.....				
Elkhart.....	2	2	1	5
Fayette.....				
Floyd.....	1	1		2
Fountain.....				
Franklin.....				
Fulton.....	1			1
Gibson.....	2	1	1	4
Grant.....		2		2
Greene.....	1			1
Hamilton.....			1	1
Hancock.....	3			3
Harrison.....				
Hendricks.....	1	1		2
Henry.....	1			1
Howard.....				
Huntington.....		2		2
Jackson.....	1			1
Jasper.....				
Jav.....		1	1	2
Jefferson.....		1	2	3
Jennings.....		2		2
Johnson.....			1	1
Knox.....			1	1
Kosciusko.....		1		1
Lagrange.....				
Lake.....				
Laporte.....	3	1		4
Lawrence.....		1		1
Madison.....	1	2		3
Marion.....	5	3	2	10
Marshall.....				
Martin.....		1	1	2
Miami.....			1	1
Monroe.....	1			1
Montgomery.....	1	2		3
Morgan.....			1	1
Newton.....				
Noble.....	2			2
Ohio.....			1	1
Orange.....				

TABLE No. 3—Continued.

COUNTIES.	Boys.	Girls.	Adult Females.	Total.
Owen.....		1		1
Parke.....				
Perry.....	1			1
Pike.....				
Porter.....				
Posey.....				
Pulaski.....				
Putnam.....			1	1
Randolph.....	1			1
Ripley.....				
Rush.....		1		1
St. Joseph.....		1	1	2
Scott.....				
Shelby.....				
Spencer.....				
Starke.....			1	1
Steuben.....				
Sullivan.....	1		1	2
Switzerland.....				
Tippecanoe.....	2	1		3
Tipton.....		1		1
Union.....				
Vanderburgh.....	1	1		2
Vermillion.....				
Vigo.....		2	1	3
Wabash.....				
Warren.....				
Warrick.....				
Washington.....		1		1
Wayne.....				
Wells.....				
White.....				
Whitley.....	1		1	2
Total.....	45	39	23	107

TABLE No. 4.

Applications on File by Counties.

COUNTIES.	Applications Accepted Pending Room.				Applications Pending Not Accepted.			
	Boys.	Girls.	Adult Females	Total.	Boys.	Girls.	Adult Females	Total.
Adams.....			1	1				
Allen.....			2	2	2		1	3
Bartholomew.....						1		1
Benton.....		1		1				
Blackford.....		1	1	2				
Boone.....								
Brown.....								
Carroll.....	1	1		2				
Cass.....	1			1				
Clark.....		1		1				
Clay.....								
Clinton.....							1	1
Crawford.....								
Daviess.....								
Dearborn.....								
Decatur.....						1		1
Dekalb.....								
Delaware.....	1			1				
Dubois.....								
Elkhart.....		2		2	1		1	2
Fayette.....								
Floyd.....			1	1				
Fountain.....								
Franklin.....								
Fulton.....		1		1				
Gibson.....		2		2				
Grant.....		1		1		1	2	3
Greene.....					1			1
Hamilton.....			1	1				
Hancock.....	1			1				
Harrison.....								
Hendricks.....								
Henry.....	1			1				
Howard.....		1		1				
Huntington.....		1	1	2				
Jackson.....	1			1				
Jasper.....								
Jay.....		1		1				
Jefferson.....			1	1	1			1
Jennings.....		1		1				
Johnson.....					1			1
Knox.....			2	2				
Kosciusko.....		2		2				
Lagrange.....								
Lake.....								
Laporte.....		1		1				
Lawrence.....		1	1	2				
Madison.....		2	2	4		1		1
Marion.....		2	1	3		1		1
Marshall.....								
Martin.....			1	1				
Miami.....			1	1				
Monroe.....								
Montgomery.....	1	2		3	1			1
Morgan.....		1	1	2			1	1

TABLE No. 4—Continued.

COUNTIES.	Applications Accepted Pending Room.				Applications Pending Not Accepted.			
	Boys.	Girls.	Adult Females	Total.	Boys.	Girls.	Adult Females	Total.
Newton.....								
Noble.....								
Ohio.....			1	1				
Orange.....								
Owen.....								
Parke.....								
Perry.....								
Pike.....								
Porter.....								
Posey.....							1	1
Pulaski.....							1	1
Putnam.....		1		1				
Randolph.....	1			1	1			1
Ripley.....		1				1		1
Rush.....		1				1		1
St. Joseph.....						1		1
Scott.....								
Shelby.....			1	1			1	1
Spencer.....								
Starke.....								
Steuben.....								
Sullivan.....	1		1	2	1			1
Switzerland.....								
Tippecanoe.....		1		1				
Tipton.....		1		1				
Union.....								
Vanderburgh.....							1	1
Vermillion.....								
Vigo.....		4	1	5		1		1
Wabash.....								
Warren.....								
Warrick.....								
Washington.....								
Wayne.....		1		1				
Wells.....								
White.....								
Whitley.....								
Total.....	9	33	21	63	9	9	10	28

FINANCIAL.

EXHIBIT No. 1.

Consolidated Statement of Revenue and Disbursements for the Fiscal Year Ending September 30, 1907.

REVENUES.

MAINTENANCE.		
Regular appropriation.....	\$122,000 00	
Excess on 28,162 inmates over 1,000, for nine months.....	2,450 08	
Expenditures as per Exhibit No. 2.....		\$114,283 41
Reverted to State Treasurer, 1-12 of appropriation.....		10,166 67
REPAIR FUND.		
Regular appropriation.....	6,000 00	
Expenditures as per Exhibit No. 3.....		5,500 00
Reverted to State Treasurer, 1-12 of appropriation.....		500 00
CUSTODIAL COTTAGE FOR BOYS.		
Appropriation.....	50,000 00	
Expenditures for year ending October 31, 1906.....		25,608 81
Expenditures as per Exhibit No. 4.....		24,391 19
ADDITION CUSTODIAL COTTAGE FOR GIRLS.		
Appropriation.....	21,000 00	
Expenditures as per Exhibit No. 5.....		442 75
Amount unexpended.....		20,557 25
FARM LAND.		
Appropriation available for 1907.....	13,312 50	
Expenditures as per Exhibit No. 6.....		13,300 00
Amount unexpended.....		12 50

DISBURSEMENTS.

From maintenance fund.....	\$114,283 41
From repair fund.....	5,500 00
From custodial cottage for boys fund.....	24,391 19
From addition custodial cottage for girls fund.....	442 75
From farm land fund.....	13,300 00
Total.....	\$157,917 35

EXHIBIT No. 2.

RECAPITULATION BY VOUCHERS OF EXPENDITURES FROM MAIN-
TENANCE FUND FOR FISCAL YEAR ENDING
SEPTEMBER 30, 1907.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
November, 1906—			
No. 1.	A. E. Carroll, Supt.....	Payroll	\$4,449 91
2.	A. E. Carroll, Supt.....	Incidentals	54 83
3.	American Dairy Co.....	Butterine	3 40
4.	American Laundry & Mach. Co.....	Mangle apron	18 62
5.	American Book Co.....	School supplies	2 07
6.	W. C. Baade.....	School supplies	60
7.	S. Bash & Co.....	Vegetables	755 34
8.	C. L. Barnhouse	Music	6 00
9.	S. Baum & Co.....	Apples and eggs.....	94 15
10.	Joe W. Bell.....	Harness repairs	6 30
11.	A. B. C. Brooks.....	Violin repairs	1 60
12.	W. B. Burford.....	Stationery and printing.....	72 57
13.	G. E. Bursley & Co.....	Dried fruit	3 65
14.	Thomas Charles Co.....	School supplies	9 45
15.	John Christie	Teams and drivers.....	127 20
16.	City Carriage Works.....	Wagon repairs	5 50
17.	P. Cosentino & Co.....	Fruits and vegetables.....	39 50
18.	Thomas Craig	Beans	32 25
19.	Craig Biscuit Co.....	Crackers	20 71
20.	Crowley Brothers	Oilcloth	15 00
21.	Cudahy Packing Co.....	Fresh meats	59 01
22.	James Dixon Crucible Co.....	Crayons	1 37
23.	Daily Fish Market.....	Oysters	8 88
24.	Dittoe Grocery Co.....	Groceries	13 51
25.	Geo. DeWald Co.....	Dry goods	380 67
26.	Dreier & Bro.....	Drugs	8 75
27.	H. A. Dreer.....	Bulbs	7 82
28.	H. H. Driggs.....	Beet pulp	61 80
29.	Excelsior Fruit & Oyster Co.....	Oysters	17 34
30.	Fairbanks-Morse & Co.....	Electrical supplies	4 56
31.	Chas. Falk & Co.....	Dry Goods	16 00
32.	A. Flanagan Co.....	School supplies	33 17
33.	Fleischmann Co.....	Yeast	5 00
34.	Ft. Wayne Builders' Sup. Co.....	Lumber	6 21
35.	Ft. Wayne Drug Co.....	Drugs	21 67
36.	Ft. Wayne Dental Depot.....	Dental supplies	4 81
37.	Ft. Wayne Oil & Supply Co.....	Engineer's supplies	3 00
38.	Samuel M. Foster.....	Rent farm	450 00
39.	D. N. Foster Furniture Co.....	Office files	35 56
40.	Frank Dry Goods Co.....	Quilts	33 12
41.	S. Freiburger & Bro.....	Leather	315 19
42.	C. L. Greeno Co.....	Twine	10 66
43.	W. D. Henderson & Co.....	Straw	47 71
44.	Higgins Artificial Ice Co.....	Ice	7 50
45.	Home Telephone & Teleg. Co.....	Telephone tolls	4 02
46.	Howenstein & Crouse.....	Poultry and eggs	290 46
47.	Johns & Thompson Co.....	Storm covers	15 00
48.	The Journal Co.....	Programs	10 50
49.	M. F. Kaag & Sons	Crockery	19 44
50.	Kell & Kell.....	Picture frame	3 05
51.	Clara L. Kohne.....	School supplies	3 09
52.	Keystone Chemical Mfg. Co.....	Tri Sodium	89 91

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
November, 1906—Continued.			
52.	Dr. W. Langtry, V. S.....	Surgical services	\$6 00
54.	Lehman Shoe Co.....	Rubber boots	26 16
55.	Thos. Lyons & Co.....	Broom corn	58 29
56.	Franklin MacVeagh & Co.....	Dried fruits	88 03
57.	Mayflower Mills	Flour	818 05
58.	Meyer Bros. Co.....	Baking powder	5 40
59.	Michigan Fish Co.....	Fish	13 10
60.	P. R. Mitchell & Co.....	Hair	17 11
61.	Moellering Bros. & Millard.....	Groceries	107 40
62.	Morris & Co.....	Butterine	282 00
63.	Mossman, Yarnelle & Co.....	Horse shoes	26 43
64.	Orr & Lockett Hardw. Co.....	School supplies	1 50
65.	Pape Furniture Co.....	Chairs	8 00
66.	P. & H. Supply Co.....	Engineer's supplies	4 65
67.	A. H. Perfect & Co.....	Syrup	82 01
68.	Peters Box & Lumber Co.....	Bass wood	4 62
69.	Perfection Biscuit Co.....	Crackers	19 80
70.	J. C. Pfeiffer.....	School supplies	47 28
71.	H. Pfeiffer & Son.....	Hardware	6 84
72.	Pottlitzer Bros.	Fruit	4 00
73.	Prang Educational Pub. Co.....	School supplies	1 19
74.	Reid, Murdoch & Co.....	Groceries	7 42
75.	Rhinesmith & Simonson.....	Lumber	4 80
76.	Rurode Dry Goods Co.....	Dry goods	9 96
77.	C. C. Schlatter & Co.....	Hardware	2 81
78.	Seavey Hardware Co.....	Hardware	29 45
79.	Singer Sewing Machine Co.....	Needles	1 24
80.	Smith Premier Typewriter Co.....	Repairs	10 70
81.	Frank B. Strodel	Cheese	1 26
82.	Silver, Burdett & Co.....	School supplies	13 71
83.	Standard Oil Co.....	Gasoline and oils	40 97
84.	Schwarzchild & Sulzberger.....	Meats	72 90
85.	Swift & Co.....	Meats	337 08
86.	Thompson & Chute Soap Co.....	Caustic soda	39 08
87.	C. Tresselt & Sons.....	Bran	149 55
88.	John Van Range Co.....	Grate bars	21 52
89.	E. VanEvery & Son.....	Horse shoes	1 50
90.	Dr. K. K. Wheelock.....	Glasses	3 50
91.	White Fruit House.....	Queensware	5 60
92.	World's Events Pub. Co.....	School supplies	1 00
93.	Wolf & Dessauer.....	Dry goods	108 56
94.	Zanesville Stoneware Co.....	Clay	2 00
95.	G. E. Bursley & Co.....	Groceries	242 88
96.	Crowley Bros.	Dry Goods	59 37
97.	Ft. Wayne Drug Co.....	Drugs	5 72
98.	S. Freiburger & Bro.....	Leather	18 37
99.	Fisher Bros. Paper Co.....	Paper	4 31
100.	Moellering Bros & Millard.....	Groceries	150 30
101.	A. H. Perfect & Co.....	Groceries	438 64
102.	A. H. Perfect & Co.....	Groceries	4 05
103.	Sprague, Warner & Co.....	Groceries	132 80
104.	Sherman Bros. Co.....	Coffees	55 46
105.	C. C. Schlatter & Co.....	Hardware	4 60
106.	Standard Oil Co.....	Paraffine	18 22
107.	Standard Oil Co.....	Gasoline	24 26
108.	Siemon Wall Paper Co.....	School supplies	5 54

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
November, 1906—Continued.			
109.	Van Camp Hardw. & Iron Co..	Hardware	\$0 97
110.	Franklin MacVeagh & Co.....	Groceries	98 80
111.	Van Camp Hardw. & Iron Co..	Hardware	6 47
Total			\$11,475 66
December, 1906—			
No. 112.	A. E. Carroll, Supt.....	Payroll	\$4,250 92
113.	A. E. Carroll.....	Salary	500 00
114.	Mary R. Harper.....	Salary as trustee.....	75 00
115.	James W. Sale.....	Salary as trustee.....	75 00
116.	Edward M. Wilson.....	Salary as trustee.....	75 00
117.	A. E. Carroll, Supt.....	Incidentals	72 37
118.	Amer. Sunday School Union...	Quarterlies	5 80
119.	Brinkmeyer, Kuhn Co.....	Soap powder	11 24
120.	Joe W. Bell.....	Harness repair	5 30
121.	S. Baum & Co.....	Apples, eggs, etc.....	93 70
122.	S. Bash & Co.....	Beans, greens, etc.....	667 17
123.	August Bruder	Gold ring	1 00
124.	W. C. Baade.....	School supplies	2 40
125.	Beadell & Co.....	Christmas notions	14 18
126.	G. E. Bursley & Co.....	Groceries	509 79
127.	G. E. Campbell, Cashier.....	Freight	38 14
128.	Crowley Brothers	Dry goods	12 61
129.	Cleary & Bailey	Christmas programs	12 50
130.	Thomas Charles Co.....	School supplies	3 25
131.	Daily Fish Market.....	Fish	1 49
132.	Dittoe Grocery Co.....	Butter, etc.	9 54
133.	Geo. DeWald Co.....	Dry goods	454 30
134.	Henry A. Dreer.....	Bulbs	1 00
135.	Excelsior Fruit & Oyster Co..	Oysters	24 20
136.	Express Publishing Co.....	Diplomas	2 00
137.	Fres Ko Chemical Co.....	Electrical supplies	1 65
138.	Fisher Bros. Paper Co.....	Paper and twine.....	4 26
139.	Ft. Wayne Drug Co.....	Drugs	44 08
140.	The Fleischmann Co.....	Yeast	5 00
141.	Ft. Wayne Sentinel.....	Advertisements	3 90
142.	Chas. Falk & Co.....	Notions	34 68
143.	Ft. Wayne Newspaper Union..	Paper	1 44
144.	Ft. Wayne Transfer Line.....	Coach hire	5 00
145.	S. Freiburger & Bro.....	Leather, etc.....	148 66
146.	S. Freiburger & Bro.....	Leather, etc.	102 12
147.	C. B. Flick Floral Co.....	Galax leaves	1 00
148.	D. N. Foster Furniture Co.....	Chairs and mats.....	23 85
149.	Ft. Wayne Oil & Supply Co....	Hose, etc.	23 73
150.	E. Gilmartin	Lumber	5 88
151.	E. R. Gesman.....	Hay	66 57
152.	Herman F. A. Gerke.....	Evergreen trees	8 50
153.	Ginn & Co.....	Books	4 24
154.	Howenstein & Crouse.....	Eggs and poultry	302 88
155.	Heit Candy Co.....	Candy	3 68
156.	Home Tel. and Tel. Co.....	Telephone rent	11 05
157.	Heit, Miller, Lau & Co.....	Empty boxes	1 92
158.	R. B. Hanna, P. M.....	Stamps and envelopes.....	117 20
159.	C. R. Higgins Artif. Ice Co....	Artificial Ice	3 00
160.	H. C. Hitzemann.....	Machine repairs	1 75

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
December, 1906—Continued.			
161.	M. A. Hanna & Co.....	Coal	\$2,376 44
162.	A. R. Hills.....	Christmas notions	17 02
163.	Internat'l Boiler Comp. Co....	Boiler compound	20 57
164.	Indiana Reformatory	Tinware	29 15
165.	M. L. Jones	Photographic supplies	1 95
166.	Geo. Jacobs	Piano tuning	4 50
167.	Clara Kohne	Embroidery material	5 86
168.	James M. Kane.....	Christmas notions	63 43
169.	M. F. Kaag & Sons.....	Crockery	117 78
170.	Lehman Shoe Co.....	Shoes	87 45
171.	John M. Morris & Co.....	Glass labels	1 01
172.	Michigan Leather Co.....	Leather	3 35
173.	Meyer Bros. Co.....	Baking powder	5 29
174.	Franklin MacVeagh & Co.....	Raisins	96 58
175.	Mayflower Mills	Oats and flour.....	1,166 23
176.	Morris & Co.....	Butterine	282 00
177.	Michigan Fish Co.....	Fish	19 70
178.	Edgar A. Murray.....	Roachaline	5 00
179.	J. & P. B. Meyers.....	School supplies	4 95
180.	Mossman, Yarnelle & Co.....	Iron	4 76
181.	Moellering Bros. & Millard....	Groceries	91 31
182.	Moellering Bros. & Millard....	Cereal coffee	7 84
183.	National Mill Supply Co.....	Packing	12 13
184.	P. & H. Supply Co.....	Plumbing supplies	28 37
185.	A. H. Perfect & Co.....	Groceries	365 61
186.	A. H. Perfect & Co.....	Dried fruits	52 41
187.	Pottlitzer Fruit Co.....	Oranges	54 54
188.	Perfection Biscuit Co.....	Crackers	19 89
189.	H. Pfeiffer & Son.....	Hardware	10 97
190.	H. Pfeiffer & Son.....	Hardware	3 14
191.	Pickard Bros.	Chairs	24 00
192.	Rothschild Bros.	Paper	5 04
193.	Rurode Dry Goods Co.....	Notions	2 35
194.	Reid, Murdoch & Co.....	Groceries	3 99
195.	Rochester Germicide Co.....	Disinfectant	67 13
196.	Sprague, Warner & Co.....	Groceries	69 73
197.	Sherman Bros. Co.....	Coffee	47 53
198.	Schwarzschild & Sulzberger....	Salt meats	145 80
199.	Swift & Co.....	Meats	513 09
200.	C. C. Schlatter & Co.....	Hardware	7 21
201.	Seavey Hardware Co.....	Hardware	50 75
202.	Standard Oil Co.....	Gasoline, etc.	52 37
203.	Standard Oil Co.....	Gasoline, etc.	24 45
204.	Thompson & Chute Soap Co....	Soap	91 89
205.	C. Tresselt & Sons.....	Brañ	164 20
206.	G. J. Thompson.....	Band supplies	6 14
207.	J. P. Tinkam Coal Co.....	Smithing coal	1 38
208.	Herbert B. Turner & Co.....	Books	1 47
209.	Lillian L. Underwood.....	Magazines	22 98
210.	Van Camp Hardw. & Iron Co..	Hardware	1 66
211.	Vaughan's Seed Store.....	Christmas Greens	12 00
212.	E. Van Every & Sons.....	Horse shoeing	5 00
213.	F. P. Wilt Co.....	Nuts	13 86
214.	Wolf & Dessauer	Dry goods, notions	183 57
215.	Paul E. Wolf.....	Cotton	12 00
216.	Jacob Willig	Gymnasium supplies	16 40
217.	J. T. Webb.....	Potter's clay	3 00
218.	White Fruit House.....	Notions	3 50
Total			\$14,355 66

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
January, 1907—			
No. 219.	A. E. Carroll, Supt.....	Payroll	\$4,257 82
220.	D. Appleton & Co.....	Book	1 62
221.	Wm. Beckman	Hay	128 35
222.	Bryan-Marsh Co.....	Electric lamps	5 22
223.	Brown Trucking Co.....	Freight and drayage.....	7 10
224.	Brand Stove Co.....	Range	148 70
225.	S. Baum & Co.....	Eggs and fruit	62 15
226.	W. C. Baade	School supplies	1 80
227.	Wm. B. Burford.....	Stationery and printing.....	111 17
228.	Joe W. Bell.....	Harness	7 33
229.	G. E. Bursley & Co.....	Groceries	93 93
230.	G. E. Bursley & Co.....	Baskets, etc.	15 06
231.	L. M. Beck.....	Watch repair	1 40
232.	W. E. Brinkman.....	Poultry food	5 00
233.	S. Bash & Co.....	Hay and straw	97 22
234.	A. E. Carroll, Supt.....	Incidentals	55 95
235.	Creamery Package Mfg. Co....	Dairy cleanser	16 20
236.	Craig Biscuit Co.....	Crackers	44 75
237.	John Christie	Work with team	25 80
238.	City Trucking Co.....	Furniture	15 00
239.	Cincinnati Gas Coke Co.....	Gas coke	84 75
240.	Dittoe Grocery Co.....	Groceries	6 19
241.	Geo. DeWald Co.....	Dry goods	457 89
242.	Henry A. Dreer.....	Flower seeds	1 55
243.	Excelsior Fruit & Oyster Co....	Oysters	30 25
244.	Educator Journal Co.....	Subscription	1 00
245.	Edmunds Elec. Const. Co.....	Coloring lamps	2 90
246.	The Fleischmann Co.....	Yeast	6 00
247.	Falk-Chaska Co.	Elastic web, etc.....	16 15
248.	Fisher Bros. Paper Co.....	Toilet paper	350 00
249.	S. Freiburger & Bro.....	Leather and findings.....	101 28
250.	S. Freiburger & Bro.....	Findings	4 41
251.	Ft. W. Paper & Blank Bk. Co....	Seal press and paper.....	9 00
252.	Ft. Wayne Newspaper Union..	Stamps, etc.	7 20
253.	Ft. Wayne Oil & Supply Co....	Oil, etc.	16 35
254.	Ft. Wayne Oil & Supply Co....	Engineer's supplies	9 98
255.	Ft. Wayne Sentinel.....	Advertisements	1 95
256.	Ft. Wayne Drug Co.....	Drugs	23 56
257.	Ft. Wayne Drug Co.....	Drugs	11 61
258.	Ft. Wayne Electric Co.....	Copper brushes	1 20
259.	Dallas F. Green.....	Clock repairing	1 00
260.	Hanna Brackenridge Co.....	Machine repairs	2 70
261.	M. A. Hanna & Co.....	Coal	1,093 62
262.	Home Tel. & Tel. Co.....	Telephone services	3 35
263.	Howenstein & Crouse.....	Eggs and poultry.....	66 05
264.	H. C. Hitzmann	Sewing machine repairs.....	2 50
265.	D. C. Heath & Co.....	Book	1 39
266.	Illinois Electric Co.....	Lamps	42 25
267.	Journal Experimental Med....	Subscription	5 00
268.	Geo. Jacobs	Piano tuning	5 50
269.	Clara L. Kohne.....	School supplies	7 23
270.	H. Kohnstamm & Co.....	Indelible ink	4 50
271.	Lehman Book & News Co.....	Book	1 00
272.	Thomas Lyons Co.....	Broom corn	71 44
273.	Lehman Shoe Co.....	Felt boots	12 66
274.	Hugo H. Meier	Dental supplies	4 00
275.	Bunkio Matsuki	School supplies	1 34
276.	J. & P. B. Myers.....	School supplies	2 50
277.	Morris & Co.....	Butterine	169 20
278.	Michigan Fish Co.....	Flsh	22 55

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
January, 1907—Continued.			
279.	Mayflower Mills	Bran, etc.	\$183 05
280.	Moellering Bros. & Millard.....	Groceries	145 42
281.	Moellering Bros. & Millard.....	Groceries	35 94
282.	Meyer Bros. Co.....	Baking powder	5 29
283.	Meyer Bros. Co.....	Baking powder	5 40
284.	Franklin MacVeagh & Co.....	Macaroni	8 91
285.	Orr & Lockett Hardw. Co.....	Hardware	1 38
286.	Pottlitzer Fruit Co.....	Oranges	5 00
287.	A. H. Perfect & Co.....	Groceries	434 49
288.	A. H. Perfect & Co.....	Groceries	167 70
289.	P. & H. Supply Co.....	Engineer's supplies	4 49
290.	Joseph Hartman	Ice	90 00
291.	H. Pfeiffer & Son.....	Hardware	10 46
292.	Reid, Murdoch & Co.....	Tapioca	4 95
293.	Rinks Art Studio.....	Photographs	9 00
294.	J. M. Stouder & Co.....	Hardware	3 20
295.	Swift & Co.....	Meats	694 00
296.	C. C. Schlatter & Co.....	Hardware	2 63
297.	C. C. Schlatter & Co.....	Hardware	6 47
298.	Seavey Hardware Co.....	Hardware	52 10
299.	Seimon Wall Paper Co.....	School supplies	2 15
300.	Standard Oil Co.....	Oil	2 22
301.	Standard Oil Co.....	Oil, etc.	107 84
302.	Sprague, Warner & Co.....	Starch, etc.	10 29
303.	Schwarzschild & Sulzberger...	Salt hams	72 30
304.	Summit City Soap Works.....	Soap	25 48
305.	Sherman Bros. Co.....	Coffee, etc.	46 10
306.	C. Tresselt & Sons.....	Bran	58 95
307.	J. M. Thornburn & Co.....	Flower seeds	4 25
308.	Bernard J. Vodde.....	Straw	48 39
309.	E. Van Every	Blacksmithing	2 75
310.	Van Camp Hardw. & Iron Co..	Iron, etc.	13 76
311.	Wolf & Dessauer	Dry goods	188 80
312.	Rudolph Wurlitzer Co.....	Instruments, musical	44 82
313.	Wadhams Oil Co.....	Chip soap	39 48
314.	L. C. Zollinger & Bro.....	Iron	1 85
315.	William A. Young.....	Music	4 58
316.	Frank Greaser	Hay	218 99
Total			\$10,527 80
February, 1907—			
No. 317.	A. E. Carroll, Supt.....	Payroll	\$4,322 48
318.	Armour Soap Works.....	Chip soap	21 42
319.	Amberg File & Index Co.....	Office files	2 90
320.	S. Baum & Co.....	Fresh fruit	28 00
321.	Joe W. Bell.....	Harness	16 10
322.	E. K. Bush.....	Eggs and poultry.....	24 37
323.	Wm. Black	Hay	39 62
324.	S. Bash & Co.....	Tallow	64 68
325.	W. C. Baade.....	School supplies	6 02
326.	L. M. Beck.....	Watch repairs	1 75
327.	G. E. Bursley & Co.....	Vinegar and syrup.....	39 00
328.	A. E. Carroll, Supt.....	Incidentals	74 20
329.	Cudahy Packing Co.....	Meat	222 46
330.	C. G. Conn Co.....	Cornet repairs	3 25
331.	Thomas Charles Co.....	School supplies	18 22
332.	Craig Biscuit Co.....	Crackers	16 31
333.	Dittoe Grocery Co.....	Groceries	8 37

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
February, 1907—Continued.			
334.	Geo. DeWald Co.....	Dry goods	\$241 13
335.	Henry A. Dreer.....	Garden seeds	6 30
336.	Dreier & Bro.....	Drugs	14 61
337.	John Dickson	Breaking plow	10 00
338.	Excelsior Fruit & Oyster Co....	Oysters	24 20
339.	Ft. Wayne Sentinel.....	Advertisements	1 95
340.	Florists' Publishing Co.....	Subscription	1 00
341.	Frank Dry Goods Co.....	Dry goods	88 70
342.	Ft. Wayne Drug Co.....	Drugs	1 50
343.	Ft. Wayne Drug Co.....	Drugs	8 40
344.	Ft. Wayne Electric Works....	Carbon Brushes	1 20
345.	The Fleischmann Co.....	Yeast	5 00
346.	Falk-Chaska Co.....	Elastic web	44 87
347.	Ginn & Co.....	Books	5 76
348.	J. I. Holcomb Mfg. Co.....	Brushes	8 00
349.	Howenstein & Crouse.....	Eggs and poultry.....	85 22
350.	Houghton Mifflin & Co.....	Book	1 35
351.	M. A. Hanna & Co.....	Coal	1,885 94
352.	Home Telep. & Teleg. Co.....	Telephone services	1 25
353.	Indiana Young P. R. Circle....	Reading circle books	12 20
354.	Illinois Electric Co.....	Electrical supplies	62 50
355.	Intern'l Boiler Comp. Co.....	Boiler compound	19 79
356.	Clara L. Kohne.....	School supplies	6 70
357.	M. F. Kaag & Sons.....	Crockery	7 79
358.	Lehman Shoe Co.....	Felt boot overs.....	12 88
359.	M. C. Lilley & Co.....	Uniform buttons	1 45
360.	Frank A. Munsey Co.....	Subscription	1 00
361.	Mayflower Mills	Feed	435 62
362.	Morris & Co.....	Butterine	228 60
363.	Michigan Fish Co.....	Fish	33 20
364.	Mossman, Yarnelle & Co.....	Iron	3 65
365.	Meyer Bros. Co.....	Baking powder, etc.....	15 05
366.	Moellering Bros. & Millard....	Syrup, etc.....	90 27
367.	Nature Study Review.....	Subscription	1 00
368.	Narragansett Machine Co.....	School supplies	8 28
369.	Theo. Presser	Music	5 18
370.	Parrot Studio	Photographs framed	5 00
371.	Orr & Lockett Hardw. Co.....	School supplies	2 88
372.	Pottlitzer Fruit Co.....	Fresh fruit	6 00
373.	P. & H. Supply Co.....	Engineer's supplies	1 17
374.	Perfection Biscuit Co.....	Crackers	25 71
375.	A. H. Perfect & Co.....	Shoe blacking	7 06
376.	A. H. Perfect & Co.....	Groceries	300 44
377.	H. Pfeiffer & Son.....	Galvanized pails	23 52
378.	Pickard Bros.	Chairs	18 00
379.	Rinks Art Studio.....	Photograph	4 00
380.	Rurode Dry Goods Co.....	School supplies	1 46
381.	Reid, Murdoch & Co.....	Cheese	10 96
382.	Frank B. Strodel.....	Groceries	1 16
383.	Siemon Wall Paper Co.....	School supplies	1 50
384.	Schwarzschild & Sulzberger....	Meats	280 94
385.	Swift & Co.....	Meats	357 22
386.	Seavey Hardware Co.....	Hardware, etc.....	14 37
387.	Sportsmen's Emporium	Door keys	2 25
388.	Singer Machine Co.....	Repairs	2 00
389.	Standard Oil Co.....	Oil, etc.....	24 48
390.	Standard Oil Co.....	Oil, etc.....	48 77
391.	Sur-Coat Mfg. Co.....	Oil	2 50

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
February, 1907—Continued.			
392.	C. C. Schlatter & Co.....	Hardware	\$38 89
393.	Sherman Bros. Co.....	Coffee	45 76
394.	E. R. Squibb & Sons.....	Drugs	8 94
395.	Sprague, Warner & Co.....	Dried fruit	154 92
396.	Truax, Greene & Co.....	Bandage rollers	2 25
397.	J. P. Tinkham Coal Co.....	Smithing coal	1 50
398.	J. M. Thorburn & Co.....	Garden seeds	19 09
399.	E. Van Every	Horse shoeing	1 90
400.	Vaughan's Seed Store.....	Garden seeds	22 40
401.	Varney's Electrical Supply Co..	Electrical supplies	17 69
402.	Van Camp Hardware Co.....	Hardware and iron.....	12 98
403.	Edgar S. Werner & Co.....	Book	1 00
404.	Wolf & Dessauer	Dry goods	1 56
405.	White Fruit House	Candy, etc.	4 22
406.	Rudolph Wurlitzer Co.....	Repairing instruments	14 75
407.	Noah J. Weber.....	Horses	692 50
408.	Wadham's Oil Co.....	Soap powder	1 22
409.	Wittkamper Woolen Co.....	Uniform cloth	67 56
410.	Julius Young	Hay	12 78
411.	William Young	Orchestra supplies	4 59
412.	L. C. Zollinger & Bro.....	Wagon repairs	1 85
413.	A. J. Criswell.....	Hay	39 41
Total			\$10,599 84

March, 1907—

No. 414.	A. E. Carroll, Supt.....	Payroll	\$4,283 28
415.	Amer. Laundry & Machy. Co..	Mangle apron	21 00
416.	H. C. Arnold & Son.....	Alfalfa and cloverseed	124 98
417.	Alienist & Neurologist	Subscription	5 00
418.	Wm. B. Burford.....	Stationery and printing.....	5 00
419.	S. Baum & Co.....	Fresh fruit	22 05
420.	H. F. Bushing.....	Hay	45 29
421.	Bausch & Lomb Optical Co....	Optical supplies	3 94
422.	Joe W. Bell.....	Harness	49 85
423.	W. C. Baade.....	School supplies	2 20
424.	S. Bash & Co.....	Tallow	120 06
425.	A. Burdsal Co.....	Sand paper, etc.....	5 20
426.	Born Steel Range Co.....	Stove repairs	7 35
427.	E. K. Bush.....	Eggs	14 40
428.	Frank S. Betz Co.....	Book	1 50
429.	Bobbs-Merrill Co.....	Books	72 12
430.	G. E. Bursley & Co.....	Groceries	124 49
431.	Chicago Rubber Clothing Co..	Rubber sheets	131 23
432.	Crowley Bros.	Dry goods, etc.....	75 30
433.	A. E. Carroll, Supt.....	Incidentals	50 01
434.	A. E. Carroll.....	Salary	500 00
435.	City Carriage Works.....	Carriage repairs	5 50
436.	Cudahy Packing Co.....	Fresh meat	20 13
437.	Dittoe Grocery Co.....	Groceries	13 35
438.	Dean Bros. Pump Works.....	Pump repairs	6 00
439.	Diether Lumber Co.....	Fence posts	34 00
440.	Geo. DeWald Co.....	Dry goods	616 36
441.	Albert Dickinson Co.....	Seeds	42 26
442.	Dreier & Bro.....	Drugs	2 97
443.	Henry A. Dreer.....	Seeds	2 00
444.	Excelsior Fruit & Oyster Co....	Oysters	24 20
445.	The Fleischmann Co.....	Yeast	6 00

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
March, 1907—Continued.			
446.	J. J. Flynn, Agent.....	Car service	\$20 00
447.	Ft. Wayne Newspaper Union...	Card board	2 05
448.	Ft. W. Paper & Blank Bk. Co..	Easter programs, etc.....	9 95
449.	Ft. Wayne Found. & Mach. Co..	Machine repairs	2 60
450.	Foster Furniture Co.....	Chairs	23 00
451.	S. Freiburger & Bro.....	Leather and findings.....	316 27
452.	S. Freiburger & Bro.....	Leather and findings.....	177 82
453.	Ft. Wayne Oil & Supply Co....	Hydraulic packing	2 94
454.	Ft. Wayne Oil & Supply Co....	Oil, etc.	18 16
455.	Ft. W. & Wab. Val. Trac. Co..	Electric lamps, etc.....	85 00
456.	Ft. Wayne Drug Co.....	Drugs	33 78
457.	Ft. Wayne Drug Co.....	Acids, etc.	16 57
458.	C. L. Greeno Co.....	Hair	35 46
459.	Fisher Bros. Paper Co.....	Paper	12 50
460.	Nora Griffin	Salary	150 00
461.	Howenstein & Crouse.....	Eggs and poultry	102 85
462.	W. D. Henderson & Co.....	Seeds	8 75
463.	M. A. Hanna & Co.....	Coal	494 97
464.	Hide, Leather & Belting Co....	Shoe findings	8 33
465.	E. Howard Clock Co.....	Record dials	9 60
466.	Home Telep. & Teleg. Co.....	Telephone services	4 15
467.	Mary R. Harper.....	Salary	75 00
468.	George Jacobs	Piano tuning	11 00
469.	Kyle Gaskill, V. S.....	Professional services	15 00
470.	Clara L. Kohne.....	School supplies	8 15
471.	Thomas Lyons & Co.....	Broom corn	41 90
472.	Hugo H. Meier, D. D. S.....	Professional services	10 00
473.	A. W. Mumford & Co.....	School supplies	2 72
474.	Mayflower Mills	Middlings	35 00
475.	Michigan Fish Co.....	Fish	18 22
476.	Meyer Bros. Co.....	Baking powder	7 06
477.	Meyer Bros. Co.....	Drugs, etc.	8 04
478.	The MacMillan Co.....	Books	5 85
479.	Edgar A. Murray.....	Roach Doom	5 00
480.	Morris & Co.....	Butterine	229 65
481.	Moellering Bros. & Millard...	Groceries	103 18
482.	O. F. Porter	Hay	21 24
483.	The Parrot Studio.....	Photograph frame	2 50
484.	A. Pepe	Hay	16 95
485.	Park Davis & Co.....	Drugs	1 15
486.	Perfection Biscuit Co.....	Crackers	43 86
487.	P. & H. Supply Co.....	Sewer trap	1 13
488.	Pickard Bros.	Stove repairs	13 80
489.	Postal Telegraph Cable Co....	Telegraph services'	1 74
490.	A. H. Perfect & Co.....	Groceries	329 55
491.	H. Pfeiffer & Son.....	Hardware	8 01
492.	Rothschild Bros.	Paper, etc.	11 84
493.	Star Milk Cooler Co.....	Milk cooler	29 60
494.	Frank B. Strodel.....	Cheese	98
495.	Swift & Co.....	Toilet soap	151 90
496.	Swift & Co.....	Fresh meat	119 86
497.	Schwarzschild & Sulzberger Co.	Fresh meat	638 85
498.	Seavey Hardware Co.....	Hardware	59 36
499.	Standard Oil Co.....	Oils, etc.	82 10
500.	Standard Oil Co.....	Oil and gasoline.....	28 10
501.	C. C. Schlatter & Co.....	Hardware	10 30
502.	C. C. Schlatter & Co.....	Hardware	4 23
503.	Sherman Bros. Co.....	Coffee	53 50

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
March, 1907—Continued.			
504.	Sprague, Warner & Co.....	Groceries, etc.	\$15 32
505.	D. Shordan & Co.....	Farming tools	44 60
506.	E. R. Squibb & Sons.....	Drugs	7 66
507.	Siemon Wall Paper Co.....	School supplies	1 37
508.	James W. Sale.....	Salary	75 00
509.	C. Tresselt & Sons.....	Bran, etc.	210 45
510.	Thompson & Chute Soap Co....	Washing soda, etc.	84 77
511.	Van Camp Hardw. & Iron Co..	Hardware	2 55
512.	E. Van Every.....	Blacksmithing	6 40
513.	Bernard J. Vodde.....	Straw	8 78
514.	F. P. Wilt Co.....	Groceries	445 94
515.	Wittkamper Woolen Co.....	Tailoring supplies	13 96
516.	Wolf & Dessauer.....	Dry goods, etc.....	22 38
517.	Western Union Teleg. Co.....	Telegraphic services	1 38
518.	Edward M. Wilson.....	Salary	75 00
519.	H. A. Wertzels.....	Hay	47 74
520.	Julius Young	Hay	46 90
Total			\$11,288 29
April, 1907—			
521.	A. E. Carroll, Supt.....	Payroll	\$4,182 88
522.	Amer. Laundry Machy. Co.....	Dry house hinges.....	4 50
523.	Amer. Photographic Pub. Co...	Subscription	1 50
524.	Abe Ackerman	Farm land rent.....	82 00
525.	L. M. Beck.....	Clock repairs, etc.....	2 35
526.	Joe W. Bell.....	Harness repairs	1 45
527.	Born Steel Range Co.....	Stove repairs	7 35
528.	S. Bash & Co.....	Seeds and tallow.....	102 77
529.	S. Baum & Co.....	Fresh fruit	14 00
530.	W. C. Baade	School supplies	3 20
531.	Barrett & Morris Co.....	Legal services	50 00
532.	Wm. B. Burford.....	Stationery and printing.....	138 03
533.	A. E. Carroll, Supt.....	Incidentals	99 79
534.	Craig Biscuit Co.....	Crackers	28 37
535.	Crowley Bros.	Dry goods	3 72
536.	Cudahy Packing Co.....	Meat	250 75
537.	James B. Clow & Sons.....	Heater repairs	7 12
538.	Cincinnati Gas Coke Co.....	Coke	89 55
539.	G. E. Campbell, Cashier.....	Freight on coke.....	40 30
540.	Dittoe Grocery Co.....	Groceries	15 67
541.	DeVilbiss Fruit & Dairy Farm.	Fruit trees	39 25
542.	Dreier & Bro.....	Medicine and instruments.....	4 10
543.	Daily Fish Market.....	Oysters	1 00
544.	Geo. DeWald Co.....	Dry goods	173 08
545.	Electric Appliance Co.....	Socket rings	1 08
546.	Excelsior Fruit & Oyster Co....	Oysters	23 65
547.	W. H. Elverson Pottery Co....	Flower pots	19 75
548.	Edmunds Electric Const. Co....	Oak pins and solder.....	4 60
549.	Ft. W. & Wab. Val. Trac. Co..	Use of side track.....	9 00
550.	Ft. Wayne Gas Co.....	Coke	5 17
551.	Ft. Wayne Sentinel.....	Advertisement	1 62
552.	The Fleischmann Co.....	Yeast	5 00
553.	Ft. W. Paper & Blank Bk. Co..	Magazine binding	13 45
554.	C. B. Flick Floral Co.....	Ferns	6 63
555.	Falk-Chaska Co.....	Buttons	8 40
556.	A. Flanagan Co.....	School supplies	4 55
557.	J. A. Fay & Egan Co.....	Machine repairs	6 21

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
April, 1907—Continued.			
558.	Ft. Wayne Found. & Mach. Co.	Sink plates	\$1 00
559.	Ft. Wayne Oil & Supply Co....	Engineer's supplies	2 45
560.	The Faultless Rubber Co.....	Water bottles	3 92
561.	Ft. Wayne Drug Co.....	Drugs, etc.	53 69
562.	Franklin MacVeagh Co.....	Vinegar	24 52
563.	James Gillie	Hay	64 43
564.	C. L. Greeno Co.....	Husks, etc.	52 81
565.	E. Gilmartin	Lumber	28 00
566.	Howenstein & Crouse.....	Eggs and poultry	82 52
567.	R. B. Hanna, P. M.....	Stamped envelopes	107 20
568.	Home Telep. & Teleg. Co.....	Rental and services.....	10 75
569.	W. D. Holteran.....	Eggs	12 00
570.	Mrs. W. M. Herriott & Son....	Dental chair	50 00
571.	Ideal School Pub. Co.....	School supplies	3 38
572.	Indiana Reformatory	Tinware	98 10
573.	Journal Nerv. & M. Disease...	Subscription	5 00
574.	G. H. Krudop	Coal	1,509 95
575.	M. F. Kaag & Sons.....	Crockery	1 10
576.	M. C. Lilley Co.....	Uniform caps	2 40
577.	Thomas Lyons & Co.....	Broom corn	35 86
578.	Dr. W. Langtry, V. S.....	Professional services	6 00
579.	Mayflower Mills	Oats	179 40
580.	Morris & Co.....	Butterine	289 50
581.	Mossman, Yarnelle & Co.....	Iron	5 05
582.	The MacMillan Co.....	Magazines	1 50
583.	Moellering Bros. & Millard....	Groceries	117 86
584.	Meyer Bros. Co.....	Baking powder, etc.....	5 78
585.	Meyer Bros. Co.....	Baking Powder	8 82
586.	Michigan Fish Co.....	Fish	8 35
587.	Postal Telegraph Cable Co....	Telegraph services	6 78
588.	A. H. Perfect & Co.....	Groceries	349 95
589.	H. Pfeiffer & Son.....	Hardware	9 06
590.	Rochester Germicide Co.....	Disinfecting fluid	70 79
591.	Rothert Water Purifying Co....	Boiler compound	31 29
592.	Reid, Murdoch & Co.....	Fruit and cheese.....	69 86
593.	Sprague, Warner & Co.....	Groceries	172 14
594.	Schroeder Bros.	Harness	95 48
595.	Storrs & Harrison.....	Berry bushes	30 50
596.	Seavey Hardware Co.....	Hardware, etc.	131 60
597.	C. C. Schlatter & Co.....	Hardware	14 92
598.	C. C. Schlatter & Co.....	Bolts, etc.	1 52
599.	F. M. Smith & Co.....	Key ring checks.....	2 00
600.	John Schmuker.....	Hay	42 34
601.	J. M. Stouder & Co.....	Wire fence	212 60
602.	J. M. Stouder & Co.....	Hardware	2 46
603.	Swift & Co.....	Meat and tallow.....	175 20
604.	Schwarzschild & Sulzberger...	Meat	542 74
605.	Standard Oil Co.....	Paraffine and turpentine.....	53 99
606.	Standard Oil Co.....	Gasoline, etc.	55 66
607.	C. Tresselt & Sons.....	Bran	70 47
608.	John Van Range Co.....	Kettle repaired	39 60
609.	E. Van Every & Sons.....	Blacksmithing	3 00
610.	Van Camp Hardware Co.....	Hardware, etc.	6 84
611.	Western Union Teleg. Co.....	Telegraph services	1 55
612.	Rudolph Wurlitzer Co.....	Music supplies	3 36
613.	Dr. K. K. Wheelock.....	Glasses and services	24 50
614.	Woif & Dessauer.....	Furniture, etc.	52 95
615.	Webb Pottery Co.....	School supplies	1 00

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
April, 1907—Continued.			
616.	Whittkaper Woolen Co.....	Tailor's supplies	\$1 63
617.	L. C. Zollinger & Bro.....	Wagon repairs	1 40
618.	J. M. Stephen	Boarding horse, etc.....	25 00
Total			\$10,525 36
May, 1907—			
No. 619.	A. E. Carroll, Supt.....	Payroll	\$4,120 66
620.	Wm. B. Burford.....	Printing	153 43
621.	L. M. Beck.....	Watch repairs	1 20
622.	W. C. Baade.....	School supplies	7 19
623.	Bosler Bros.	Shoe findings	3 47
624.	G. E. Bursley & Co.....	Potatoes and bran.....	240 00
625.	G. E. Bursley & Co.....	Cereal coffee	34 40
626.	Frank S. Betz Co.....	Sterilizer	42 00
627.	S. Baum & Co.....	Bananas	12 75
628.	B. H. Baker	Carriage repairs	76 35
629.	A. E. Carroll, Supt.....	Incidentals	88 70
630.	Cudahy Packing Co.....	Fresh meats	20 36
631.	C. G. Conn Co.....	Cornet repairs	5 00
632.	Craig Biscuit Co.....	Crackers	16 23
633.	Dittoe Grocery Co.....	Groceries	15 13
634.	Geo. DeWald Co.....	Dry goods	606 54
635.	Electric Appliance Co.....	Shade holders	2 86
636.	Fleischmann Co.	Yeast	5 00
637.	A. Flanagan Co.....	School supplies	8 87
638.	Florists' Exchange	Subscription	1 00
639.	Ft. Wayne Dental Depot.....	Dental supplies	9 95
640.	Ft. Wayne Drug Co.....	Drugs	5 06
641.	Ft. Wayne Drug Co.....	Drugs	29 29
642.	Ft. Wayne Oil & Supply Co....	Engineer's supplies	9 65
643.	Friedman Mfg. Co.....	Butterine	122 00
644.	C. L. Greeno Co.....	Cotton lintens	30 58
645.	E. Gilmartin	Fence posts	5 00
646.	Howenstein & Crouse.....	Eggs and poultry.....	102 75
647.	Huntington Mill Co.....	Flour	850 00
648.	Huntington Mill Co.....	Flour	890 50
649.	H. C. Hitzemann	Sewing machine repairs.....	2 90
650.	I. R. Howard & Co.....	Sugar	212 84
651.	Peter Henderson Co.....	Seeds	3 25
652.	Home Telep. & Teleg. Co.....	Telephone services	6 25
653.	George Jacobs	Piano tuning	2 50
654.	Keystone Chemical Co.....	Sodium phosphate	91 22
655.	Clara L. Kohne.....	School supplies	7 48
656.	M. F. Kaag & Sons.....	Crockery	18 15
657.	Ft. Wayne Box Co.....	Pigeon hole boxes.....	10 00
658.	M. A. Hanna & Co.....	Coal	591 53
659.	Journal Company	Advertisements	3 16
660.	Dr. W. Langtry, V. S.....	Professional services	8 50
661.	J. B. Lippincott.....	U. S. Dispensatory.....	6 38
662.	Lea Brothers	Vol. Osler's medicine.....	6 00
663.	M. C. Dilley & Co.....	Band caps	25 85
664.	Edgar A. Murray.....	Insect powder	5 00
665.	Meyer & Klopfenstein.....	Harness	36 00
666.	Michigan Leather Co.....	Shoe findings	4 36
667.	Mayflower Mills	Flour and feed.....	192 24
668.	Morris & Co.....	Butterine	115 80
669.	Michigan Fish Co.....	Fish	8 35

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
May, Continued—Continued.			
670.	Mossman, Yarnelle & Co.....	Iron	\$2 34
671.	Meyer Bros. Co.....	Baking powder	8 82
672.	Moellering Bros. & Millard.....	Groceries	40 60
673.	Franklin MacVeagh & Co.....	Groceries	32 96
674.	News Publishing Co.....	Advertisements	3 10
675.	Perfection Biscuit Co.....	Crackers	18 79
676.	Pottlitzer Fruit Co.....	Fresh fruit	21 75
677.	F. C. Parham.....	Dump carts	90 00
678.	A. H. Perfect & Co.....	Groceries	306 61
679.	A. H. Perfect & Co.....	Groceries	125 20
680.	Postal Telegraph Cable Co.....	Telegraph services	2 85
681.	H. Pfeiffer & Son.....	Hardware	18 54
682.	Dr. B. W. Rhamy.....	Turberculin	2 00
683.	Reid, Murdoch & Co.....	Groceries	161 68
684.	Schroeder Bros.	Harness repairs	1 75
685.	Sprague, Warner & Co.....	Groceries	79 49
686.	Sherman Bros. Co.....	Tea and coffee.....	62 87
687.	E. R. Squibb & Sons.....	Drugs	7 88
688.	Seavey Hardware Co.....	Hardware, etc.	84 49
689.	C. C. Schlatter & Co.....	Hardware	12 74
690.	C. C. Schlatter & Co.....	Hardware	16 54
691.	J. M. Stouder & Co.....	Drawer locks	4 90
692.	Frank B. Strodel.....	Cheese	1 34
693.	Swift & Co.....	Fresh meat	401 11
694.	Schwarzschild & Sulzberger...	Meats	435 05
695.	David F. Spindler.....	Surveying	11 00
696.	Standard Oil Co.....	Oil supplies	61 15
697.	Standard Oil Co.....	Oil supplies	58 22
698.	C. Tresselt & Sons.....	Bran and oats.....	250 08
699.	G. J. Thompson.....	Band music	3 02
700.	J. P. Tinkham Coal Co.....	Coal	1 50
701.	Vaughan's Seed Store.....	Seed peas	4 00
702.	E. Van Every & Sons.....	Blacksmithing	1 35
703.	F. P. Wilt Co.....	Enamaline	1 66
704.	Wolf & Dessauer.....	Dry goods	454 62
705.	Western Union Telegraph Co...	Telegraph services	2 62
706.	William Young	Music supplies	12 10
707.	John Waters	Hay and straw	173 76
Total			\$11,852 16
June, 1907—			
No. 708.	James W. Sale.....	Salary as trustee.....	75 00
709.	Albert P. Sinclair.....	Salary as trustee.....	75 00
710.	Mary R. Harper.....	Salary as trustee.....	75 00
711.	Edward M. Wilson.....	Salary as trustee.....	75 00
712.	Albert E. Carroll.....	Salary as superintendent.....	500 00
713.	Nora Griffin	Salary as matron.....	150 00
714.	A. E. Carroll, Supt.....	Payroll	4,121 37
715.	American Medical Association...	Subscription	5 00
716.	Wm. H. Armstrong & Co.....	Hospital supplies	2 28
717.	S. Baum & Co.....	Fresh fruit	58 00
718.	W. C. Baade	School supplies	9 25
719.	Bausch & Lomb Optical Co....	Glass slides	1 32
720.	Brookside Farm Co.....	Stallion services	60 00
721.	L. M. Beck	Watch repairs	2 50
722.	Becker Paper Co.....	Paper, etc.	2 89
723.	G. E. Bursley & Co.....	Groceries, etc.	320 98

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
June, 1907—Continued.			
724.	P. Cosentino & Co.....	Fresh fruit	\$11 05
725.	A. B. C. Brooks.....	Violin repairs	3 50
726.	A. E. Carroll, Supt.....	Incidentals	43 70
727.	Cudahy Packing Co.....	Meat and lard.....	352 81
728.	Crowley Bros.	Dry goods	127 30
729.	Daily Fish Market.....	Fish	1 50
730.	Geo. DeWald Co.....	Dry goods	711 86
731.	Dittoe Grocery Co.....	Groceries	7 86
732.	Friedman Mfg. Co.....	Butterine	245 45
733.	Ft. W. & Wab. Val. Trac. Co..	Use of siding.....	8 00
734.	Frank Dry Goods Co.....	Dry goods	29 33
735.	Ft. Wayne Dental Depot.....	Dental supplies	14 58
736.	Fleischmann & Co.....	Yeast	4 00
737.	Foster Furniture Co.....	Chairs	16 00
738.	Ft. Wayne Drug Co.....	Drugs	61 48
739.	M. A. Hanna & Co.....	Coal	690 12
740.	Home Telep. & Teleg. Co.....	Telephone services	1 65
741.	A. R. Hills.....	Sundries	2 15
742.	W. D. Henderson & Co.....	Seeds, etc.	10 90
743.	I. R. Howard & Co.....	Sugar	589 62
744.	Howenstein & Crouse.....	Eggs and poultry.....	86 19
745.	John Hopkins Press.....	Subscription	5 00
746.	M. C. Hunt.....	Laundry supplies	88 78
747.	Indianapolis News	Advertisements	1 50
748.	Journal Co.	Advertisements	1 14
749.	Keil & Keil.....	Picture frames	14 79
750.	M. F. Kaag & Sons.....	Crockery	10 92
751.	Lehman Shoe Co.....	Boots	3 43
752.	Lea Brothers & Co.....	Vol. Osler's Medicine	6 00
753.	Thomas Lyons & Co.....	Broom twine	5 58
754.	W. Langtry, V. S.....	Professional services	5 50
755.	Michigan Fish Co.....	Fresh fish	8 30
756.	Franklin MacVeagh & Co.....	Fibre measures	1 10
757.	Mayflower Mills	Middlings	78 87
758.	Mossman, Yarnelle & Co.....	Iron	2 40
759.	J. P. Martin & Co.....	Pump packing	2 97
760.	Moellering Bros. & Millard....	Groceries	96 01
761.	Meyer Bros. Co.....	Baking powder	14 99
762.	McNeil & Higgins Co.....	Groceries	23 91
763.	News Publishing Co.....	Advertisements	2 60
764.	National Mill Supply Co.....	Belt lacing	1 62
765.	Pottlitzer Fruit Co.....	Fruits and nuts.....	41 30
766.	A. H. Perfect & Co.....	Fire works	46 54
767.	A. H. Perfect & Co.....	Groceries	364 44
768.	Perfection Biscuit Co.....	Crackers	43 93
769.	Ed F. Perry.....	Pictures	16 00
770.	H. Pfeiffer & Son.....	Hardware	13 33
771.	Reid, Murdoch & Co.....	Groceries	108 00
772.	Sprague, Warner & Co.....	Fresh fruits	117 58
773.	Sherman Bros. Co.....	Coffee	50 46
774.	Swift & Co.....	Meat and lard	687 66
775.	Schwarzschild & Sulzberger....	Fresh and salt meat.....	176 78
776.	Seavey Hardware Co.....	Hardware, etc.	50 01
777.	Standard Oil Co.....	Gasoline	28 28
778.	Standard Oil Co.....	Oil, etc.	98 01
779.	Frank B. Strodel.....	Cheese	1 05
780.	Schroeder Bros.	Harness, etc.	3 65
781.	James W. Sale, Trustee.....	Traveling expenses	10 15

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
June, 1907—Continued.			
782.	Albert P. Sinclair, Trustee.....	Traveling expenses	\$22 99
783.	E. Van Every.....	Blacksmithing	8 90
784.	Vaughan's Seed Store.....	Lawn sprinklers	5 64
785.	Varney Electrical Supply Co...	Electrical supplies	1 48
786.	Van Camp Hardware Co.....	Iron, etc.	20 84
787.	Edward M. Wilson, Trustee...	Traveling expenses	11 60
788.	Wolf & Dessauer.....	Dry goods, etc.....	80 80
789.	Western Union Telegraph Co..	Telegrams	1 31
790.	Weil Bros. Co.....	Tallow	37 55
791.	F. P. Wilt & Co.....	Sugar, etc.	178 08
Total			\$11,154 41
July, 1907—			
No. 792.	A. E. Carroll, Supt.....	Payroll	\$3,757 96
793.	Amberg File & Index Co.....	Letter files	2 05
794.	American Laundry Mach. Co...	Mangle apron	20 58
795.	A. Booth & Co.....	Fresh fish	11 70
796.	S. Bash & Co.....	Seed beans	2 50
797.	S. Baum & Co.....	Oranges and bananas.....	37 07
798.	A. B. C. Brooks.....	Violin strings	1 20
799.	Wm. B. Burford.....	Printing and stationery.....	112 14
800.	Frank S. Betz & Co.....	Glass jars	3 00
801.	G. E. Bursley & Co.....	Cereal, etc.	71 31
802.	A. E. Carroll, Supt.....	Incidentals	78 24
803.	Chicago Rubber Clothing Co...	Rubber sheets	66 82
804.	P. Cosentino & Co.....	Bananas	15 47
805.	G. E. Campbell, Cashier.....	Freight on coal	53 33
806.	Cudahy Packing Co.....	Beef and pork.....	158 28
807.	James B. Clow & Sons.....	Basin stoppers	2 64
808.	Crowley Bros.	Dry goods, etc.....	42 61
809.	Dittoe Grocery Co.....	Groceries	11 52
810.	Geo. DeWald Co.....	Dry goods	188 13
811.	Dreier & Bro.....	Truss and needles.....	4 70
812.	Ft. Wayne Dental Depot.....	Dental supplies	8 88
813.	Fleischmann Co.	Yeast	5 00
814.	Freidman Mfg. Co.....	Butterine	243 60
815.	Foster Furniture Co.....	Mirrors	12 00
816.	Ft. W. Artificial Ice Co.....	Artificial ice	1 60
817.	Ft. W. & Wab. Trac. Co.....	Electrical supplies, etc.....	6 24
818.	Ft. Wayne Box Co.....	Letter boxes	4 00
819.	Ft. Wayne Drug Co.....	Drugs	7 21
820.	Ft. Wayne Drug Co.....	Drugs	28 86
821.	Frank Dry Goods Co.....	Corset jeans	21 60
822.	Ft. Wayne Printing Co.....	Rubber stamps	1 17
823.	Ft. Wayne Oil & Supply Co...	Wheelbarrows	15 00
824.	Ft. Wayne Oil & Supply Co...	Polish and packing.....	4 41
825.	Ft. Wayne Sentinel.....	Legal notice	1 20
826.	C. L. Greeno Co.....	Mattress supplies	27 42
827.	G. W. Griffith & Co.....	Binder repairs	4 60
828.	M. A. Hanna & Co.....	Coal	363 02
829.	H. C. Hitzemann.....	Sewing machine repairs.....	7 45
830.	A. R. Hills.....	Base balls, etc.....	6 05
831.	Home Telep. & Teleg. Co.....	Rental, etc.	14 75
832.	Howenstein & Crouse.....	Eggs and poultry.....	87 74
833.	Huntington Mill Co.....	Corn meal	22 76
834.	International Boiler Comp. Co..	Boiler compound	19 58
835.	The Journal Co.....	Legal notice	1 98

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
July, 1907—Continued.			
836.	M. F. Kaag & Co.....	Crockery	\$9 41
837.	Dr. W. Langtry, V. S.....	Professional services	6 50
838.	Mayflower Mills	Oats	178 22
839.	Mondamin Dairy Co.....	Ice cream	30 00
840.	Mossman, Yarnelle & Co.....	Lag screws	1 00
841.	Meyer Bros. Co.....	Baking powder	4 50
842.	Meyer Bros. Co.....	Baking powder	4 41
843.	David McKay	Haying privilege	25 00
844.	Franklin MacVeagh & Co.....	Rice and rolled oats.....	53 14
845.	Moellering Bros. & Millard....	Groceries, etc.	51 53
846.	Peru Basket Co.....	Laundry baskets	40 28
847.	Perfection Biscuit Co.....	Crackers	34 26
848.	A. H. Perfect & Co.....	Groceries	76 25
849.	H. Pfeiffer & Son.....	Poultry netting	2 30
850.	Rurode Dry Goods Co.....	Safety pins	4 80
851.	Dr. B. W. Rhamy.....	Tuberculin	2 00
852.	Reid, Murdock & Co.....	Groceries	56 90
853.	Swift & Co.....	Fresh meat, etc.....	662 52
854.	Schwarzschild & Sulzberger....	Veal and hams.....	155 46
855.	Schroeder & Bro.....	Harness repairs	5 25
856.	Frank B. Strodel.....	Cheese	1 31
857.	Singer Sewing Machine Co.....	Machine needles	2 03
858.	Seavey Hardware Co.....	Hardware, etc.	47 93
859.	Sprague, Warner & Co.....	Corn starch	13 70
860.	Sherman Bros. Co.....	Coffee	38 02
861.	Standard Oil Co.....	Oil and gasoline.....	40 83
862.	Standard Oil Co.....	Gasoline	37 71
863.	C. C. Schlatter & Co.....	Pulleys	1 53
864.	C. C. Schlatter & Co.....	Hardware	10 17
865.	Robert Spice	Pump repairs	14 75
866.	D. Shordon & Co.....	Mower and repairs.....	49 70
867.	Summit City Soap Works.....	Soap	29 40
868.	C. Tresselt & Sons.....	Middlings	44 57
869.	G. J. Thompson.....	Instrument repairs	4 50
870.	E. Van Every & Son.....	Smithing	7 05
871.	Van Camp Hardware Co.....	Scales	7 82
872.	Van Camp Hardware Co.....	Hardware	72 28
873.	E. A. Waters.....	Hay	16 34
874.	Wolf & Dessauer.....	Dry goods	44 54
875.	Weil Bros. & Co.....	Tallow	23 82
876.	F. P. Wilt Co.....	Sugar	176 83
877.	William Young	Violin strings	8 80
878.	L. C. Zollinger & Bro.....	Wagon and repairs.....	51 00
Total			\$7,705 73
August, 1907—			
No. 879.	A. E. Carroll, Supt.....	Payroll	\$3,713 49
880.	Amer. Laundry Machy. Co.....	Hinges	3 00
881.	Armour & Co.....	Butterine and veal.....	173 29
882.	Artificial Ice Co.....	Ice	1 20
883.	A. Booth & Co.....	Fish	23 40
884.	A. B. C. Brooks.....	Violin repairs	4 12
885.	Cooney Bayer Cigar Co.....	Tobacco stems	1 00
886.	L. M. Beck.....	Watch repairs	2 13
887.	Wm. B. Burford.....	Stationery and printing.....	87 81
888.	A. E. Carroll, Supt.....	Incidentals	67 61
889.	James B. Clow & Sons.....	Plumber's supplies	2 94
890.	Cudahy Packing Co.....	Meats	161 85

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
August, 1907—Continued.			
891.	Chicago Brush Co.....	Hair brushes	\$18 00
892.	Dittoe Grocery Co.....	Groceries	13 51
893.	Geo. DeWald Co.....	Dry goods	145 43
894.	Dreier & Bro.....	Drugs, etc.	3 70
895.	Ft. Wayne Dental Depot.....	Dental supplies	10 76
896.	Ft. Wayne Sentinel.....	Advertisements	1 14
897.	Ft. Wayne Drug Co.....	Drugs	4 59
898.	Ft. Wayne Drug Co.....	Drugs	37 38
899.	Ft. Wayne Oil & Supply Co....	Engineer's supplies	8 09
900.	Ft. W. & Wab. Val. Trac. Co..	Use of siding.....	5 00
901.	Falk-Chaska Co.	Combs	9 00
902.	Carl Fisher	Band music	10 70
903.	Friedman Mfg. Co.....	Butterine	60 90
904.	Fleischmann Co.	Yeast	5 00
905.	Dallas F. Green.....	Clock repairing	3 00
906.	G. W. Griffith.....	Binder repairs	2 10
907.	H. C. Hitzemann.....	Sewing machine repairs.....	3 00
908.	Home Telep. & Teleg. Co.....	Telephone services	1 40
909.	M. W. Huffman.....	Eggs	31 50
910.	Howensteln & Crouse.....	Eggs and poultry.....	54 17
911.	J. T. Johnson.....	Eggs	17 10
912.	Journal. Co.	Advertiseents	1 39
913.	Victor Koehl & Co.....	Tuberculin	3 10
914.	James M. Kane.....	Foot ball	2 25
915.	M. F. Kaag & Sons.....	Crockery	45 93
916.	Lehman Shoe Co.....	Slippers	3 25
917.	Lyon & Healy.....	Music	4 91
918.	Michigan Leather Co.....	Sole leather	145 47
919.	Meyer Bros. Co.....	Baking powder	11 47
920.	Wm. Moellerings Sons.....	Floor wax	2 94
921.	Franklin MacVeagh & Co.....	Groceries	30 07
922.	Moellering Bros. & Millard...	Salt, etc.	6 76
923.	Moellering Bros. & Millard...	Groceries	28 29
924.	Frank Pilliod	Threshing	26 18
925.	P. & H. Supply Co.....	Plumber's supplies	73
926.	Perfection Biscuit Co.....	Crackers	37 10
927.	A. H. Perfect & Co.....	Groceries	22 74
928.	Reid, Murdoch & Co.....	Raisins	67 81
929.	Rothschild Bros.	Paper	15 12
930.	Summit City Soap Works.....	Soap	220 50
931.	Frank B. Strodel.....	Cheese	1 31
932.	Swift & Co.....	Meat	220 69
933.	Schwarzschild & Sulzberger...	Meat	440 05
934.	Schroeder & Bro.....	Harness repairs	4 00
935.	Seavey Hardware Co.....	Hardware	11 30
936.	C. C. Schlatter & Co.....	Hardware	5 32
937.	Standard Oil Co.....	Gasoline	27 23
938.	Standard Oil Co.....	Oil, etc.	83 53
939.	J. P. Tinkham Coal Co.....	Smithing coal	1 50
940.	C. Tresselt & Sons.....	Provender	122 32
941.	E. Van Every	Smithing	4 50
942.	Van Camp Hardware Co.....	Hardware	12 18
943.	Weil Bros. Co.....	Tallow	46 74
944.	F. P. Wilt Co.....	Vinegar	11 06
945.	Western Union Teleg. Co.....	Telegrams	1 82
946.	White Fruit House.....	Lemons	1 20
947.	L. C. Zollinger & Bro.....	Wagon repairs	7 00

Total \$6,365 07

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
September, 1907—			
No. 948.	A. E. Carroll, Supt.....	Payroll	\$3,816 28
949.	Albert E. Carroll.....	Salary superintendent	500 00
950.	Nora Griffin	Salary as matron	150 00
951.	James W. Sale.....	Salary as trustee.....	75 00
952.	Albert P. Sinclair	Salary as trustee.....	75 00
953.	Mary R. Harper.....	Salary as trustee.....	75 00
954.	Edward M. Wilson.....	Salary as trustee.....	75 00
955.	Armour & Co.....	Butterine and veal.....	368 37
956.	S. Bash & Co.....	Tallow	43 62
957.	G. E. Bursley & Co.....	Groceries	105 96
958.	Wm. B. Burford.....	Stationery and printing.....	70 51
959.	A. Booth & Co.....	Fish	21 30
960.	E. K. Bush.....	Poultry	11 61
961.	Bausch & Lomb Optical Co.....	Glass slides	2 26
962.	L. M. Beek.....	Repairing glasses	1 00
963.	A. B. C. Brooks.....	Violin repairs	2 40
964.	Cudahy Packing Co.....	Meat, fresh	58 17
965.	Craig Biscuit Co.....	Crackers	20 82
966.	A. E. Carroll, Supt.....	Incidentals	41 73
967.	Crowley Bros.	Brass pins	4 43
968.	Cin. Gas Coke, C. & M. Co....	Coke	80 55
969.	A. B. Dick Co.....	Stencil paper	3 50
970.	Dittoe Grocery Co.....	Groceries	12 53
971.	Henry A. Dreer.....	Bulbs	2 38
972.	Geo. DeWald Co.....	Dry goods	164 29
973.	DePuy Mfg. Co.....	Elbow splint	1 50
974.	Dreier & Bro.....	Hospital supplies	1 52
975.	Ft. Wayne Sentinel.....	Legal notice	2 82
976.	Ft. Wayne Drug Co.....	Drugs, etc.	65 07
977.	Ft. W. & Wab. Val. Trac. Co..	Use of siding.....	6 00
978.	The Fleischmann Co.....	Yeast	4 00
979.	S. Freiburger & Bro.....	Shoe findings	10 11
980.	Geo. W. Gillie, V. S.....	Professional services	8 00
981.	M. W. Huffman.....	Eggs	36 90
982.	M. A. Hanna & Co.....	Coal	812 83
983.	M. C. Hunt.....	Caustic soda	17 42
984.	Howenstein & Crouse.....	Eggs and poultry.....	37 70
985.	Home Telep. & Teleg. Co.....	Telephone services	4 10
986.	Indiana Fuel Supply Co.....	Coal	93 00
987.	Indiana Reformatory	Mops, etc.	47 85
988.	Intern'l Boiler Comp. Co.....	Boiler compound	18 40
989.	J. T. Johnson.....	Eggs	19 35
990.	Geo. Jacobs	Piano tuning	2 50
991.	Journal-Gazette	Legal notice	2 94
992.	M. F. Kaag & Sons.....	Crockery	56 61
993.	E. H. Kirkland, Agent.....	Freight	36 25
994.	Mayflower Mills	Ground corn	42 50
995.	Meyer Bros. Co.....	Baking powder	9 81
996.	Moellering Bros. & Mihad....	Groceries	68 92
997.	Wm. Moellering's Sons.....	Paint brushes	10 29
998.	Franklin MacVeagh & Co.....	Rice, etc.	48 25
999.	National Mill Supply Co.....	Injector	7 50
1000.	Pottlitzer Fruit Co.....	Fresh fruit	4 75
1001.	A. H. Perfect & Co.....	Vinegar, etc.	34 01
1002.	Perfection Biscuit Co.....	Crackers	15 47
1003.	P. & H. Supply Co.....	Engineers' supplies	98
1004.	H. Pfeiffer & Son.....	Hardware	2 30
1005.	Seavey Hardware Co.....	Cotton waste, etc.....	9 71

EXHIBIT No. 2—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
September, 1907—Continued.			
1006.	C. C. Schlatter & Co.....	Hardware	\$21 31
1007.	Swift & Co.....	Tallow, etc.	64 36
1008.	Schwarzschild & Sulzberger.....	Meat	341 77
1009.	Sherman Bros. Co.....	Coffee	15 68
1010.	Frank B. Strodel	Cheese	1 18
1011.	James W. Sale, trustee.....	Traveling expense	5 50
1012.	Albert P. Sinclair, trustee.....	Traveling expense	20 52
1013.	Alex H. Staub.....	Tinware repairs	2 10
1014.	Schroeder Bros.	Harness	4 30
1015.	Standard Oil Co.....	Oil and gasoline.....	37 52
1016.	G. J. Thompson.....	Band supplies	5 25
1017.	C. Tresselt & Sons.....	Provender	134 68
1018.	E. Van Every.....	Horse shod	1 50
1019.	The F. P. Wilt Co.....	Salt and vinegar.....	29 67
1020.	Western Union Telegraph Co.....	Services	1 26
1021.	Van Camp Hardw. & Iron Co.....	Iron	16 27
1022.	Wolf & Dessauer.....	Dry goods	35 50
1023.	Rudolph Wurlitzer Co.....	Band instrument repairs.....	4 82
1024.	Mary R. Harper, trustee.....	Traveling expenses	1 50
1025.	Edward M. Wilson, trustee.....	Traveling expenses	8 15
1026.	L. H. Wolff, Agent.....	Insurance	34 50
1027.	M. F. Kaag & Sons.....	Crockery	12 39
1028.	M. A. Hanna & Co.....	Coal	312 63
Total			\$8,433 43
Grand total			\$114,283 41

EXHIBIT No. 3.

RECAPITULATION BY VOUCHERS OF EXPENDITURES FROM RE-
PAIR FUND FOR FISCAL YEAR ENDING
SEPTEMBER 30, 1907.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
November, 1906—			
No. 1.	Blombach & Co.....	Plasterers	\$17 25
2.	James B. Clow & Sons.....	Water heater	99 13
3.	Ft. Wayne Builders Supply Co.....	Lumber	13 72
4.	Ft. Wayne Foundry Machy. Co.....	Machine repairs	1 00
5.	Henry Franke	Lumber	29 01
6.	E. Gilmartin	Lumber	11 76
7.	Irmscher & Westhoff	Brick masons	36 61
8.	Wm. Moellering's Sons	Glass and lime	4 30
9.	P. & H. Supply Co.....	Plumber's supplies	18 81
10.	H. Pfeiffer & Co.....	Nails and paint	10 03
11.	Rhinesmith & Simonson	Lumber	118 97
12.	Seavey Hardware Co.....	Nails	6 25
13.	Standard Oil Co.....	Oil and turpentine	74 70
14.	C. C. Schlatter & Co.....	Hardware	12 22
15.	A. Burdsal Co.....	Paints	11 57
16.	Wm. Moellering's Sons	Lead and varnish	152 05
17.	C. C. Schlatter & Co.....	Paint	59
Total			\$617 97

EXHIBIT No. 3—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
December, 1906—			
18.	A. E. Carroll, Supt.....	Pay roll	\$95 00
19.	James B. Clow & Sons	Plumber's supplies	24 47
20.	Ft. Wayne Oil & Supply.....	Pipe	25 70
21.	Ft. Wayne Oil & Supply Co....	Fittings	67
22.	Ft. Wayne Builder's Supply Co.	Lumber	20 00
23.	Ft. Wayne Builder's Supply Co.	Lumber	32 34
24.	William Geake	Stone	1 00
25.	Wm. Moellering's Sons.....	Paints	48 81
26.	Peterson Oven Co.....	Grates	30 00
27.	P. & H. Supply Co.....	Sink and fittings	31 73
28.	P. & H. Supply Co.....	Plumber's supplies	70 42
29.	Rhinesmith & Simonson	Lumber	24 25
30.	C. C. Schlatter & Co.....	Glass	13 59
31.	C. C. Schlatter & Co.....	Glass	1 27
32.	Seavey Hardware Co.....	Nails	1 05
33.	John Welch & Sons	Roof repairs	106 43
Total			\$526 73
January, 1907—			
34.	A. E. Carroll, Supt.....	Pay roll	\$128 87
35.	Otto Blombach	Plastering	13 05
36.	Ft. Wayne Oil & Supply Co....	Pump	3 43
37.	Ft. Wayne Oil & Supply Co....	Hydrant valve	5 39
38.	J. M. Henry	Weather strips	72 33
39.	Irmischer & Westhoff	Mason work	5 20
40.	Wm. Moellering's Sons.....	Oil, etc.....	45 60
41.	P. & H. Supply Co.....	Pipe and fittings	8 92
42.	P. & H. Supply Co.....	Pipe and fittings	35 23
43.	A. D. Palmer	Plastering	10 00
44.	Rhinesmith & Simonson.....	Window sash	80
45.	C. C. Schlatter & Co.....	Glass, etc.....	8 22
46.	C. C. Schlatter & Co.....	Leather belt, etc.....	36 35
47.	Seavey Hardware Co.....	Repairing lock	2 00
48.	Frank Seymore	Walling cistern	5 00
49.	Smith & Randall Lumber Co....	Custom sawing	10 35
50.	Varney Electrical Supply Co..	Electric wire	10 33
51.	John H. Welch & Sons.....	Roof repairs, etc.....	103 58
52.	L. Wolff Mfg. Co.....	Bath tubs and sinks	50 10
Total			\$554 75
February, 1907—			
53.	A. E. Carroll, Supt.....	Payroll	\$110 00
54.	Henry Franke	Lumber	118 87
55.	J. M. Henry	Weather strips	25 75
56.	H. M. Hooker Co.....	Bronzing liquid	3 25
57.	Knight & Jillson Co.....	Pipe and fittings	30 10
58.	Wm. Moellering's Sons	Varnish, etc.....	91 29
59.	A. D. Palmer	Plastering	22 00
60.	H. Pfeiffer & Son.....	Cistern cover, etc.....	4 45
61.	Seavey Hardware Co.....	Glass, etc.....	31 50
62.	C. C. Schlatter & Co.....	Glass	2 16
63.	John H. Welch & Sons.....	Roof repairs	14 67
Total			454 04

EXHIBIT No. 3—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
March, 1907—			
64.	A. E. Carroll, Supt.....	Payroll	\$198 92
65.	A. Hattersley & Sons	Grate set	20 20
66.	Wm. Moellering's Sons.....	White lead, etc.....	143 57
67.	A. D. Palmer	Plastering	19 00
68.	C. C. Schlatter & Co.....	Glass	14 36
69.	John H. Welch & Sons.....	Roof repairing	7 57
Total			\$405 62
April, 1907—			
70.	A. E. Carroll, Supt.....	Payroll	\$166 90
71.	Ft. Wayne Builders Supply Co.	Lumber	71 76
72.	H. M. Hooker Co.....	Putty	3 80
73.	Wm. Moellering's Sons.....	Paints, etc.....	29 89
74.	P. & H. Supply Co.....	Soil pipe	4 90
75.	P. & H. Supply Co.....	Pipe and fittings	13 62
76.	Perrine-Armstrong Co.....	Lumber	20 14
77.	A. D. Palmer	Plastering	16 80
78.	Seavey Hardware Co.....	Glass and nails	14 20
Total			\$342 01
May, 1907—			
79.	A. E. Carroll, Supt.....	Payroll	\$283 10
80.	James B. Clow & Sons.....	Pipe and fittings	101 03
81.	Ft. Wayne Builders Supply Co.	Lumber	55 85
82.	Ft. Wayne Foundry Mach. Co.	Slate treads	25 00
83.	Ft. Wayne Oil & Supply Co....	Iron pipe	8 53
84.	Knight & Jillson	Pipe and fittings	11 12
85.	Wm. Moellering's Sons.....	Oil and cement	61 38
86.	Wm. Moellering's Sons.....	Oil, etc.....	21 79
87.	H. Pfeiffer & Son.....	Nails, etc.....	8 15
88.	C. C. Schlatter & Co.....	Glass and locks	1 55
89.	C. C. Schlatter & Co.....	Glass, etc.....	9 18
Total			\$586 68
June, 1907—			
90.	A. E. Carroll, Supt.....	Payroll	\$268 96
91.	James B. Clow & Sons.....	Boiler repairs	5 35
92.	James B. Clow & Sons	Iron pipe	23 94
93.	Dean Bros. Steam Pump Wks..	Pump repairs	7 36
94.	Ft. Wayne Builders Supply Co.	Lumber	9 80
95.	Indiana Paint & Varnish Co....	Bronzing powder, etc.....	11 03
96.	P. & H. Supply Co.....	Fittings	1 41
97.	H. Pfeiffer & Son.....	Nails	4 32
98.	Rhinesmith & Simonson.....	Lumber	138 21
99.	Seavey Hardware Co.....	Brushes and glass	11 20
100.	Robert Spice	Cutting threads	5 60
101.	C. C. Schlatter & Co.....	Glass	1 75
Total			\$488 93
July, 1907—			
102.	A. E. Carroll, Supt.....	Payroll	\$129 88
103.	Otto Blombach	Plastering	20 60
104.	James B. Clow & Sons.....	Heater repairs	42 89

EXHIBIT No. 3—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
July, 1907—Continued.			
105.	Dean Bros. Steam Pump Wks..	Pump repairs	\$4 16
106.	Ft. Wayne Builders Supply Co.	Lumber	14 40
107.	Ft. Wayne Oil & Supply Co.	Iron pipe	51 45
108.	Wm. Geake	Stone sill	6 85
109.	Irmscher & Westhoff	Mason work	33 55
110.	Joseph P. Martin & Co.	Hose and couplings	24 52
111.	Wm. Moellering's Sons.....	Paint, etc.....	147 93
112.	Standard Oil Co.....	Turpentine	31 29
113.	Rhinesmith & Simonson	Lumber	60 30
114.	Seavey Hardware Co.....	Locks, etc.	27 26
115.	John H. Welch & Sons.....	Roof repairs	20 85
Total			\$615 93
August, 1907—			
116.	A. E. Carroll, Supt.....	Payroll	\$157 58
117.	W. D. Allen Mfg. Co.....	Belt	20 40
118.	Diether Lumber Co.....	Lumber	19 40
119.	Ft. Wayne Builders Supply Co.	Lumber	26 34
120.	Irmscher & Westhoff	Mason work	21 00
121.	Rhinesmith & Simonson.....	Lumber	29 63
122.	Seavey Hardware Co.....	Nails, etc.....	6 30
123.	C. C. Schlatter & Co.....	Hinges, etc.....	16 87
124.	C. C. Schlatter & Co.....	Hardware	8 96
125.	Alex H. Staub	Tinware, chimney top	8 50
126.	Robert Spice	Well cleaning	23 90
127.	Standard Oil Co.....	Turpentine	31 53
Total			\$370 41
September, 1907—			
128.	A. E. Carroll, Supt.....	Payroll	\$175 00
129.	Peter Baltes	Brick work	10 45
130.	Ft. Wayne Builders Supply Co.	Lumber	13 24
131.	H. Pfeiffer & Son.....	Paint	10 51
132.	P. & H. Supply Co.....	Water closets	54 16
133.	Perrine-Armstrong Co.....	Lumber	25 60
134.	Rhinesmith & Simonson.....	Lumber	84 75
135.	C. C. Schlatter & Co.....	Glass and roofing	7 63
136.	Standard Oil Co.....	Turpentine	28 97
137.	Van Camp Hardw. & Iron Co...	Boiled oil	42 31
138.	Wm. Moellering's Sons.....	Fire clay	1 50
139.	Bass Foundry & Mach. Co....	Fire door liners	3 00
140.	E. Gilmartin	Lumber	79 81
Total			\$536 93
Grand total			\$5,500 00

EXHIBIT No. 4.

RECAPITULATION BY VOUCHERS OF EXPENDITURES FROM CUSTODIAL COTTAGE FOR BOYS' BUILDING FUND FOR FISCAL YEAR ENDING SEPTEMBER 30, 1907.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
November, 1906—			
85.	Ft. Wayne Builders Supply Co.	Sewer pipe	\$81 08
86.	P. & H. Supply Co.	Traps and ferrules	78 76
87.	Pickard Bros.	Furniture	861 09
88.	C. C. Schlatter & Co.	Hardware	587 23
89.	Henry Thoma & Son.	Rockers	60 50
90.	Varney Electrical Supply Co.	Electrical supplies	36 20
91.	Wolf & Dessauer	Sheeting	97 10
92.	Gruber & Bengs Iron Works.	Tanks	641 50
93.	Wm. Geake	Stone	1,080 90
Total			\$3,524 36
December, 1906—			
94.	A. E. Carroll, Supt.	Payroll	\$166 75
95.	Brown Trucking Co.	Drayage	10 48
96.	The F. Bissell Co.	Electrical supplies	48 99
97.	James B. Clow & Sons.	Water pipe	241 25
98.	Geo. DeWald Co.	Dry goods	688 78
99.	Electric Appliance Co.	Lamps, etc.	65 75
100.	Ft. Wayne Builders Supply Co.	Lumber	63 90
101.	Wm. Geake	Stone work	200 00
102.	A. Hattersley & Sons.	Heating contract	2,500 00
103.	Monarch Electric & Wire Co.	Ceiling lights	16 20
104.	Wm. Moellering's Sons.	Sewer pipe	2 23
105.	P. & H. Supply Co.	Soil pipe	316 62
106.	P. & H. Supply Co.	Pipe	377 76
107.	Trentman Supply Co.	Cement	2 25
108.	Henry Thoma & Son.	Chairs	5 50
109.	Grotholtman & Co.	General contract	1,800 00
Total			\$6,506 46
January, 1907—			
110.	A. E. Carroll, Supt.	Payroll	\$164 31
111.	A. Hattersley & Sons.	Valves and fittings	162 68
112.	Irmscher & Westhoff	Mason work	55 20
113.	P. & H. Supply Co.	Fittings	688 35
114.	P. & H. Supply Co.	Lavatories, etc.	435 86
115.	Rhinesmith & Simonson.	Table legs	24 00
116.	Wolf & Dessauer	Dry goods	27 85
117.	Varney Electrical Supply Co.	Opal shades	6 25
118.	Consolidated Engineering So.	Royalty, etc.	250 00
Total			\$1,814 50
February, 1907—			
119.	A. Hattersley & Sons.	Pipe and fittings	\$64 85
120.	P. & H. Supply Co.	Sinks, etc.	503 67
121.	P. & H. Supply Co.	Soil pipe, etc.	40 02
122.	H. A. Grotholtman & Co.	Construction work	5,000 00
123.	C. C. Schlatter & Co.	Screws	1 41
124.	Varney Electrical Supply Co.	Electric wire	7 27

EXHIBIT No. 4—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
February, 1907—Continued.			
125.	Paul E. Wolf	Husks	\$28 00
126.	Weil Bros. & Co.....	Scrap lead	28 75
127.	Wing & Mahurin.....	Plans and specifications	300 00
Total			\$5,973 97
March, 1907—			
128.	E. T. Barnum	Wire guards	\$1 80
129.	Columbus Wire & Iron Wks...	Wire guards	207 00
130.	Henry Franke	Lumber	10 51
131.	Irmischer & Westhoff	Mason work	6 60
132.	P. & H. Supply Co.....	Soil pie, etc.....	182 28
133.	H. Pfeiffer & Son.....	Screws, etc.....	8 43
134.	C. C. Schlatter & Co.....	Hardware	19 01
135.	Varney Electrical Supply Co...	Electric wire	28 27
136.	Weil Bros. & Co.....	Lead	30 00
Total			493 90
April, 1907—			
137.	A. E. Carroll, Supt.....	Payroll	\$247 00
138.	Consolidated Engineering Co....	Heating plans, etc.....	250 00
139.	James B. Clow & Sons.....	Pig lead	67 65
140.	Ft. Wayne Electro-Plating Co..	Plating faucets	1 25
141.	Varney Electrical Supply Co....	Wire and ceiling forms	66 41
142.	A. Hattersley & Sons.....	Tile floor and heating	1,518 10
143.	P. & H. Supply Co.....	Fittings	10 33
144.	P. & H. Supply Co.....	Fittings, etc.....	6 55
145.	Robert Spice	Pipe and lead	10 35
Total			\$2,177 64
May, 1907—			
146.	Ft. Wayne Builders Supply Co.	Sewer pipe	\$33 48
147.	Joseph P. Martin & Co.....	Galvanized iron pipe	14 65
148.	P. & H. Supply Co.....	Fittings	72 77
Total			\$120 90
June, 1907—			
149.	C. C. Schlatter & Co.....	Hardware	\$6 44
Total			\$6 44
July, 1907—			
150.	Edward M. Baltes	Sewer pipe	\$20 48
151.	Diether Lumber Co.....	Lumber	46 50
152.	Ft. Wayne Art Glass Co.....	Plate glass transom	97 50
153.	H. A. Grotholtman & Co.....	Construction contract	1,000 00
154.	Seavey Hardware Co.....	Stove pipe	11 40
155.	C. C. Schlatter & Co.....	Flume seat hinges	6 86
Total			\$1,182 74
August, 1907—			
156.	H. A. Grotholtman & Co.....	General contract	\$2,271 70
157.	Fisher Bros. Paper Co.....	Paper racks	13 23
158.	John Christie	Team work	10 80
159.	Chas. Mengerson	Team work	18 00
Total			\$2,313 73

EXHIBIT No. 4—Continued.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
September, 1907—			
	160. Wing & Mahurin	Architects' fee	\$276 55
	Total		\$276 55
	Grand total		\$50,000 00

EXHIBIT No. 5.

RECAPITULATION BY VOUCHERS OF EXPENDITURES FROM ADDITION CUSTODIAL COTTAGE FOR GIRLS FUND FOR FISCAL YEAR ENDING SEPTEMBER 30, 1907.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
March, 1907—			
	No. 1. Paul Manufacturing Co.....	Cord wood	\$442 75
	Total		\$442 75
	Grand total		\$442 75

EXHIBIT No. 6.

RECAPITULATION BY VOUCHERS OF EXPENDITURES FROM FARM LAND FUND FOR FISCAL YEAR ENDING SEPTEMBER 30, 1907.

<i>Date.</i>	<i>To Whom Paid.</i>	<i>Character of Claim.</i>	<i>Amount.</i>
March, 1907—			
	No. 1. Abe Ackerman	Farm land	\$13,300 00
	Total		\$13,300 00
	Grand total		\$13,300 00

INDUSTRIES.

STATEMENT SHOWING WORK OF INDUSTRIES.

DRESSMAKING DEPARTMENT.

Aprons, gingham	28
Aprons, white	22
Capes	11
Drawers, flannel and muslin	451
Dresses	801
Gowns	500
Guimpes	5
Handkerchiefs, white	168
Skirts	273
Waists, under	93
Union suits	241
Undervests, flannel	13
<hr/>	
Total number pieces new work	2,606

SEWING AND MENDING DEPARTMENT.

Aprons, denim	197
Aprons, sateen	3
Bibs and napkins	2,101
Caps, sateen	39
Comforts	46
Clothes sacks	5
Curtains, window, pairs	68
Meat and barrel covers	40
Neckties, silk	6
Pillow cases	907
Sheets	802
Shirts and waists	776
Straight jackets	38
Towels and dresser scarfs	2,142
<hr/>	
Total number pieces new work	7,170

SEWING ROOM, COTTAGE FOR ADULT FEMALES.

Aprons, denim	19
Bibs, crash	36
Clothes sacks	2
Dresses	229
Drawers	94

SEWING ROOM—Continued.

Gowns	98
Napkins, table	145
Napkins, toilet	72
Pillow cases	124
Restraining sleeves	13
Sheets	64
Towels, bath	192
Towels, roller	53
Table cloths	14
Undershirts	62
Union suits	48
<hr/>	
Total number of pieces new work	1,265

TAILORING DEPARTMENT.

Coats, jeans	135
Coats, white duck	21
Combination suits	87
Drawers	314
Gowns	480
Jackets, denim	29
Jackets, straight	11
Jackets, sateen	15
Overalls	468
Pants, jeans	291
Restraining muffs	18
Undershirts, flannel	240
Uniforms (band)	10
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Total number of pieces new work	2,119

SHOEMAKING DEPARTMENT.

Shoes, new, pairs	876
Shoes, repaired, half soles	1,613
Shoes, repaired, minor work	2,321

BAKERY.

Bread, wheat, pounds	289,893
Bread, corn, pounds	14,090
Bread, ginger, pounds	8,177
Buns, dozen	5,986
Cake, pounds	856
Coffee cake, pounds	11,948
Cookies, dozen	4,953
Pies	540
Zwiebach, pounds	230

BROOMMAKING DEPARTMENT.

Brooms, carpet and barn	1,115
Brooms, whisk	72
Total	1,187

COLONY FARM.

Apples, 238½ bushels	\$95 40
Beans, string, 125 bushels	64 05
Beets, 6¾ bushels	2 70
Cabbage, 1,169 heads	45 38
Cauliflower, 82 heads	4 10
Carrots, 7 bushels	2 10
Corn, 836 dozen	41 80
Cucumbers, 35,672, only	35 67
Grapes, 278 pounds	5 56
Lettuce, 357 pounds	17 85
Muskmelons, 1357, only	40 71
Onions, 5¼ bushels	3 07
Onions, 2,603 dozen	78 09
Peaches, 310½ bushels	463 75
Pears, 13½ bushels	16 20
Peas, 22¾ bushels	18 20
Peppers, 1 dozen	10
Potatoes, 131 bushels	86 40
Potatoes, sweet, ½ bushel	60
Radishes, 650 dozen	19 50
Rhubarb, 5,928 pounds	29 65
Spinach, 81 pounds	3 98
Tomatoes, 112 bushels	44 80
Turnips, ½ bushel	13
Watermelons, 99, only	14 85
Beef, fresh, 1,982 pounds	112 03
Calves, 5	20 00
Cows, 1	20 00
Chickens, spring, 24	6 00
Chicken, 106 pounds	14 37
Ducks, 9 pounds	1 17
Eggs, 234½ dozen	37 91
Liver, 441 pounds	14 48
Milk, 258,326 pounds	3,874 91
Mutton, 997 pounds	98 79
Pelts	86 08
Pork, fresh, 20,455 pounds	1,513 33
Veal, 1,466 pounds	104 67
Wool, 114 pounds	30 78
Hay, 25 tons	200 00
Husks, 3,950 pounds	39 50
Oats, 315½ bushels	138 82
Total	\$7,447 48

HOME GARDEN.

Apples, 12 bushels	\$7 20
Asparagus, 712 pounds	71 20
Beans, string, 123½ bushels	61 75
Beets, 66⅔ bushels	26 55
Cabbage, 4,279 heads	171 16
Carrots, 161½ bushels	4 95
Cauliflower, 269 heads	13 45
Celery, 12 bunches	2 16
Corn, sweet, 381 dozen	19 05
Cucumbers, 18,092 only	18 09
Egg plants, 83	4 15
Gooseberries, 368 quarts	29 44
Grapes, 7,130 pounds	142 60
Lettuce, 1,276 pounds	63 80
Muskmelons, 286	11 44
Onions, 6,100 dozen	183 00
Parsnips, 53 bushels	21 20
Peas, 78¼ bushels	58 69
Peppers, 175 dozen	17 50
Radishes, 241 dozen	7 23
Rhubarb, 13,269 pounds	66 35
Spinach, 10 pounds	40
Squash, 80½ dozen	16 10
Strawberries, 88 quarts	5 28
Tomatoes, 300 bushels	105 00
Turnips, 34 bushels	8 50
Watermelons, 7.....	1 05

Total\$1,137 29

LIST OF OFFICERS AND EMPLOYES, SEPTEMBER 30, 1907.

<i>Name and Position.</i>	<i>Wages.</i>
A. E. Carroll, superintendent	\$166 66
Chas. G. Beall, physician	125 00
Harold K. Mouser, interne	16 66
Nora Griffin, matron	50 00
Melvin Druckemiller, chief clerk	75 00
Leone Marsh, stenographer	40 00
Margaret Townsend, record clerk	20 00
Carrie Griffith, night clerk	35 00
Frank Johnson, storekeeper	45 00
Frank Anglin, store clerk	25 00
C. D. Mead, principal	100 00
Mrs. Martha Kimble, teacher	40 00
Grace Thompson, teacher	40 00
Anna R. Auten, teacher	40 00
Mrs. M. A. Summerbell, teacher	40 00
Marie Wintermote, teacher	40 00
Emma Jackley, teacher	40 00
Grace Ewart, teacher	35 00
Rosalie Decker, teacher	30 00
Berenice Warren, teacher	30 00
Helen Hutchinson, teacher	30 00
Elizabeth Ellis, teacher	25 00
Mildred Winch, teacher	25 00
Georgie Von Eberhart, orchestra directress	40 00
G. J. Thompson, band director	45 00
Harry Thompson, supervisor	40 00
Wm. J. Smith, supervisor	60 00
Mrs. Bertie McConahy, supervisoress	35 00
Ella McCormick, supervisoress	35 00
Bella McTavish, supervisoress	35 00
Francis Thompson, head nurse	40 00
Margaret Carney, nurse	22 50
Lillian Stouder, nurse	22 50
Margaret McCoy, nurse	18 00
Mary E. Lowry, night nurse	30 00
Mabel Harvey, attendant	15 00
Alice Gier, attendant	15 00
G. W. Hollopeter, attendant	30 00
Mrs. G. W. Hollopeter, attendant	20 00
Frank Davis, attendant	20 00
Oscar Bell, attendant	22 50
Mrs. Oscar Bell, attendant	15 00
Harmon W. Saylor, attendant	20 00

LIST OF OFFICERS AND EMPLOYES, SEPTEMBER 30, 1907—Cont'd.

<i>Name and Position.</i>	<i>Wages.</i>
James Clark, attendant	\$25 00
F. B. Miller, attendant	25 00
Albert DuBois, attendant	20 00
Arthur Bayh, attendant	18 00
Alma McCormick, attendant	20 00
Pearl Maxwell, attendant	20 00
Emma Oldham, attendant	20 00
Minnie Gilkey, attendant	20 00
Mayme Knapp, attendant	20 00
Nellie Merrill, attendant	20 00
Kate Naughton, attendant	20 00
Maggie McCartney, attendant	20 00
Marie Monehan, attendant	12 00
Mrs. Grace Abrams, attendant	22 50
Phoebe Squiers, attendant	18 00
Emma Treadway, attendant	22 50
Marian Merrill, attendant	18 00
Lalla Hopkins, attendant	25 00
Edna Zent, attendant	22 50
Charlotte Rambole, attendant	22 50
Elmer Flowers, attendant	25 00
Jno. M. Coble, attendant	22 50
Edwin Erwin, attendant	22 50
B. F. Clark, attendant	22 50
Mrs. B. F. Clark, attendant	15 00
Carl Landgren, attendant	18 00
Wm. Mundt, night attendant	25 00
Susie Calvin, night attendant	25 00
Iva Dowell, night attendant	25 00
Mrs. M. Clippinger, night attendant	25 00
Clarence Ailer, night attendant	30 00
*H. K. Malich, general night watch	45 00
Mary A. Bolar, cook	20 00
*Rilla Ward, cook	25 00
Mrs. P. G. Bouillon, cook	25 00
Dora Corbin, cook	25 00
Alma E. Kinney, cook	25 00
Della Webster, cook	25 00
Mrs. Elmer Flowers, cook	25 00
Maggie Griffin, domestic	25 00
Mrs. Bert Deardorff, domestic	20 00
Mrs. Irma Syphers, domestic	12 00
Anna Gormley, domestic	20 00
Anna B. Godwin, domestic	20 00
Susan Carroll, domestic	20 00
Lamberta Magers, domestic	15 00
Jennie Clark, domestic	12 00

LIST OF OFFICERS AND EMPLOYEES, SEPTEMBER 30, 1907—Cont'd.

<i>Name and Position.</i>	<i>Wages.</i>
Rachael Hill, domestic	\$18 00
Mrs. Morris Pullin, domestic	20 00
Mrs. Ora May, domestic	12 00
Kittie Hargrave, head laundress	35 00
Kate Gormley, laundress	22 50
Margaret Knapp, laundress	18 00
Amy May, laundress	15 00
Bessie Geyer, laundress	15 00
*John Harrison, laundryman	30 00
Mrs. Frank Johnson, seamstress	25 00
Susie Chappell, seamstress	20 00
Mrs. M. A. McLaughlin, seamstress	20 00
Mrs. Edwin Erwin, seamstress	18 00
Augusta Hopkins, seamstress	15 00
P. G. Bouillon, butcher	40 00
*Andrew Heinzlemann, baker	60 00
*Wm. Juergens, head carpenter	50 00
Geo. Johnson, carpenter	40 00
E. Valentine, carpenter	50 00
*Fred Tilbury, carpenter	40 00
*Wm. Mertz, painter	50 00
*Henry Meurer, mattress maker	50 00
*Fred Koenig, tailor	50 00
John Miller, shoemaker	60 00
D. F. Opdyke, outside overseer	30 00
Edward E. Taylor, teamster	20 00
Wm. Soule, teamster	25 00
*James Wesson, teamster	25 00
Frank Wilhelms, florist	50 00
*Wm. Simmons, gardener	30 00
*Daniel Rehm, gardener	30 00
Philip Schmidt, gardener	22 50
Philip Bouillon, Sr., gardener	22 50
*John Dickson, head farmer	60 00
Wm. Miller, horticulturist	25 00
Christ Christener, dairyman	25 00
*S. M. Peggs, farm hand	35 00
Morris Pullin, farm hand	30 00
John Miller, farm hand	25 00
Albert R. Shie, farm hand	25 00
Bert Lhamon, farm hand	22 50
*Lew DeHaven, chief engineer	100 00
Bert Deardorff, engineer	50 00
*C. B. Magers, engineer	50 00
Lewis Mansdorfer, fireman	25 00
Wm. Steenman, fireman	30 00
Wm. Ostmann, fireman	30 00

LIST OF OFFICERS AND EMPLOYES, SEPTEMBER 30, 1907—Cont'd.

<i>Name and Position.</i>	<i>Wages.</i>
*J. J. Harlor, blacksmith	\$45 00
Leon Miller, electrician	35 00
Eldred Sherrick, plumber	25 00
Ray Prough, plumber's helper	25 00
Geo. D. Guenther, plumber's helper	25 00
Otto F. Nees, plumber's helper	25 00
Monroe Johnston, janitor	35 00
Frank Shearer, janitor	25 00

All officers and employes are furnished board, room and laundry excepting those marked (*), who received meals only.



INDIANA

School for the Blind

SIXTY-FIRST ANNUAL REPORT

OF THE

BOARD OF TRUSTEES AND
SUPERINTENDENT

FOR THE

FISCAL YEAR ENDING SEPTEMBER 30, 1907

To the Governor

INDIANAPOLIS:

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.

1908.

THE STATE OF INDIANA, }
EXECUTIVE DEPARTMENT,
INDIANAPOLIS, December 28, 1907. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, December 28, 1907. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

December 28, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana,
December 28, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer December 28, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

INDIANA SCHOOL FOR THE BLIND.

1907-1908.

OFFICERS.

Board of Trustees.

A. C. PILKENTON, Greenfield, Ind., President.
F. F. WILEY, Edinburg, Ind., Vice-President.
J. F. HENNESSEY, Indianapolis, Ind., Treasurer.
L. M. DUNLAP, Covington, Ind., Secretary.

GEORGE S. WILSON, Superintendent.
GEORGE MCINTIRE, Bookkeeper.
DAISY S. WILSON, Matron.
SUSA BARTTLINGCK, Assistant Matron.
ELIZABETH EVANS, Boys' Governess.
KATE CASEY, Girls' Governess.
FRANK A. MORRISON, Physician.
STELLA FREAD, Usher.

TEACHERS.

Literary Department.

A. C. EVENS, 48 W. St. Joseph St.
MABEL HAUK, 2212 Broadway.
OLIVE AUGHINEBAUGH, 2241 N. Alabama St.
NANNIE CRAMPTON, Flat 4, 220 W. North St.
MARY CATHERWOOD, 2204 N. Delaware St.
FLORENCE REYNOLDS, 2210 Broadway.

Music Department.

ADELAIDE M. CARMAN, 923 N. Pennsylvania St.
WILLIAM T. SHANNON, 16 E. Twenty-second St.
LULU A. FISHER, 129 E. Pratt St.
BERTHA SCHELLSCHMIDT, 436 E. Ohio St.

Physical Culture.

WALTER F. KELLY, Washington St. and Ritter Ave.

Industrial Department.

CHARLES B. KEELER, 1025 S. Illinois St.
CARA B. FRENCH, 330 Shiel Apartments.
B. F. SMITH, 2499 Kenwood Ave.
WILLIAM RHOADES, 1403 Ottawa St.

Skilled Labor.

IRVIN R. SHARP, Engineer, 1824 Highland Place.
WILLIAM JOHANSON, Florist, 623 Dorman St.
GEORGE WALLACE, Night Engineer, 24½ Kentucky Ave.
MAY MURRAY, Laundress, 801 Highland Ave.
HENRY J. BEIDLER, Baker, Institution.

REPORT OF THE BOARD OF TRUSTEES.

HON. J. FRANK HANLY, *Governor of Indiana*:

DEAR SIR—The Trustees of the Indiana School for the Blind have the honor to submit herewith the sixty-first annual report for the fiscal year ending September 30, 1907.

In the management of the affairs of this School we have aimed to exercise such care and economy as will afford the most efficient service with the means available. No effort has been made to return any money to the State so long as it was needed in any department of the School or for any improvement in the buildings. We solicit examination of the detailed reports, believing that they will show care and economy with the sole purpose of securing the best at our command. We have sought to supply everything possible that would promote the comfort and happiness and encourage the efforts of the pupils and add to the efficiency of the School. We are gratified to report a general improvement in the work and invite the closest inspection, believing that it largely fills the purpose of its maintenance.

The appropriations have been sufficient under the present prices and salaries. We have not in every case been able to purchase all we desired or to pay the wages to which we think the employes were justly entitled, but we have fairly well met every demand. There have been several requests for increases in wages and salaries owing to the increased cost of living, but we could make no material advance without facing a deficit, so we lost the service of several employes whom we desired much to retain.

Again we have had little sickness. The entire absence, among our pupils, of typhoid fever, measles, scarlet fever and diphtheria, generally more or less prevalent in the city, indicates their healthy condition. In a few cases pupils were compelled to return home because they were unable to

do the school work, but in no case was there serious sickness while school was in session.

There has been rather more than the usual amount of repairs and improvements. The shops, chapel and gymnasium have been redecorated. All of the hardwood floors have been revarnished or oiled. Much painting has been done where most needed. However, a special appropriation will soon be needed to paint the exterior of the main building, to repair the roofs and towers. A sufficient amount can not be spared from the regular appropriation for incidental repairs for this exterior work.

In the case of eleven pupils who are now past the legal school age and who have for several years past done acceptable school work, and who will soon graduate, we have, upon their written request, permitted their continuance; but in no case has anyone been admitted who is past twenty-one years of age. We have been able to take care of all who are otherwise eligible and who are between the ages of eight and twenty-one years, but these sufficiently tax the capacity of the School without extending the years of eligibility.

Below we give a summary of the statistical tables contained in this report:

FINANCIAL.

The financial condition on September 30, 1907, was as follows:

Real estate	\$544,100 00
Personal property	30,264 72

Total	\$574,364 72
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Receipts—Appropriations, Regular—

Maintenance	\$34,000 00
*One-twelfth deduction	2,833 33

Net maintenance	\$31,166 67
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Industries	\$3,000 00
*One-twelfth deduction	250 00

Net industries	2,750 00
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*In compliance with Section 2, Chapter 143, of the Acts of the Sixty-fifth General Assembly of Indiana.

Repairs	\$2,500 00	
*One-twelfth deduction	208 33	
Net repairs		\$2,291 67
Library	\$500 00	
*One-twelfth deduction	41 67	
Net library		458 33
Total—Regular, net.....		\$36,666 67
Receipts—Sales—		
Broom shop	\$218 60	
Cane shop	25 60	
Sewing room	28 65	
Miscellaneous	11 45	
Total sales		284 30
Total receipts from appropriations and sales.....		\$36,950 97
Expenditures—		
Maintenance	\$31,163 48	
Industries	2,748 35	
Repairs	2,287 16	
Library	456 68	
Total expenditure		36,655 67
Balance converted into State Treasury.....		\$295 30

PER CAPITA EXPENSES.

We give here the per capita expenses for the past ten years based on the total enrollment, and of the maintenance based on the average attendance:

1898	\$192 80	\$227 36
1899	205 60	221 08
1900	196 51	202 75
1901	204 06	207 54
1902	220 07	236 95
1903	243 35	249 20
1904	231 33	271 64
1905	231 45	249 27
1906	246 82	263 50
†1907	230 54	242 76

*In compliance with Section 2, Chapter 143, of the Acts of the Sixty-fifth General Assembly of Indiana.

†The fiscal year ending September 30, 1907, consists of eleven months.

POPULATION.

	Boys.	Girls.	Total.
Enrollment for the year.....	71	88	159
Average daily attendance.....	59.93	68.44	128.37
Present September 30, 1907.....	56	75	131

An act passed by the General Assembly of 1907, chapter ninety-eight, section one, and approved March 2, 1907, increased the Board of Trustees to four members. Upon the appointment of the additional member under this law, the Board organized by the continuation of A. C. Pilkenton as president, L. M. Dunlap as secretary, J. F. Hennessey as treasurer and the selection of F. F. Wiley as vice-president. We have endeavored to comply with all the additional provisions of this new law.

Sincerely,

A. C. PILKENTON, President.

F. F. WILEY, Vice-President.

J. F. HENNESSEY, Treasurer.

L. M. DUNLAP, Secretary.

SUPERINTENDENT'S REPORT.

To the Honorable Trustees of the Indiana School for the Blind:

GENTLEMEN—I herewith, agreeable to custom and legislative requirement, submit for your consideration the sixty-first annual report of the Indiana School for the Blind. This report contains such data as is required by law, with whatever additional information, outlines and tables as are needed by the officers, employes and teachers, and such information as may be of value to the general public.

There were enrolled during the past school session sixty-six boys and seventy-six girls and during the fiscal year seventy-one boys and eighty-eight girls. The attendance was fairly regular, there being an average attendance of 59.93 boys and 68.44 girls, or a total of 128.37 for each day of the session. There are now present fifty-six boys and seventy-five girls.

During the fiscal year there were two suspensions. At the close of the year there were five dismissed as incompetent for further instruction. The applications of all eligible candidates have been accepted, admission being denied to those only who were disqualified because of age, physical or mental disability.

We herewith give the names and addresses of all pupils who have been enrolled during the past fiscal year:

ENROLLMENT.

BOYS.

PUPIL'S NAME.	PARENT OR GUARDIAN.	COUNTY FROM WHICH PUPIL ENROLLED.	ADDRESS OF PUPIL.	Grade.
Addington, Everett.....	M. Addington.....	Randolph.....	Winchester, R. F. D. 3.....	7
Allen, Robert.....	Hattie Gordon.....	Marion.....	Indianapolis.....	4
Ambler, Wessie.....	William Ambler.....	Benton.....	Oxford.....	1
Anders, Floyd.....	William Anders.....	Sullivan.....	Sullivan.....	4
Bales, Goldy.....	Mary E. Gill.....	Marion.....	Indianapolis 2418 Brightwood Ave.....	4
Bevens, Isaac.....	Charles Bevens.....	Marion.....	Indianapolis, 622 E. 30th St.....	2
Blakey, Geo.....	Chapman Blakey.....	Marion.....	Indianapolis, 824 Roanoke.....	7
Blue, Ralph.....	Anna Blue.....	Tippecanoe.....	Lafayette, R. F. D. 8.....	7
Bradway, Edgar.....	A. L. Bradway.....	Marion.....	Indianapolis, 320 S. Warman.....	11
Browning, Irving.....	Wesley Browning.....	Tipton.....	Windfall.....	4
Brown, Ralph.....	Harry Brown.....	Marion.....	Indianapolis, 1034 Hosbrook.....	7
Bussing, Armand.....	Geo. Bussing.....	Vanderburgh.....	Evansville, 1033 Cherry.....	5
Chadwick, Chas.....	Preston Chadwick.....	Madison.....	Pendleton, R. F. D. 43.....	12
Christman, Herbert.....	Jno. Christman.....	Huntington.....	Huntington, R. F. D. 1.....	1
Clark, Clarence.....	Mrs. Mary Booher.....	Montgomery.....	Crawfordsville, 308 N. Walnut.....	7
Clark, Jesse.....	Wallace Clark.....	Bartholomew.....	Columbus, 1433 Union.....	7
Cockerham, Homer.....	Samuel Cockerham.....	Marion.....	Indianapolis, 621 Patterson.....	5
Crume, Levi.....	J. H. Crume.....	Elkhart.....	Elkhart, R. F. D. 7.....	3
Daum, Carl.....	August Daum.....	Marion.....	Indianapolis, 316 Blake.....	1
Day, Orville.....	Daniel Day.....	Martin.....	Shoals, R. F. D. 2.....	3
Delaney, Thomas.....	C. Delaney.....	Marion.....	Indianapolis, 317 N. California.....	10
Dempsey, Ora.....	John Dempsey.....	Vigo.....	Terre Haute, 2528 N. 7th.....	2
Dicks, Nathan.....	Allen Dicks.....	Grant.....	Fairmount.....	3
Duffner, Henry.....	H. W. Duffner.....	Lake.....	Hammond.....	1
Dunn, Ernest.....	A. J. Dunn.....	Boone.....	Zionsville, R. F. D. 30.....	4
Elliott, Earl.....	Minnie Miller.....	Allen.....	Ft. Wayne, 1302 Lafayette.....	3
Flemming, Glenn.....	Amelia Flemming.....	Marion.....	Indianapolis.....	1
Gimlich, August.....	Henry Gimlich.....	Vanderburgh.....	Evansville, R. F. D. 8.....	4
Glascoek, Wheatley.....	J. L. Glascock.....	Marion.....	Indianapolis, 2124 Bellefontaine.....	10
Harrison, Russell.....	Otto Lieurance.....	Grant.....	Marion, 1853 S. Adam.....	7
Herring, Ruby.....	William Herring.....	Wells.....	Keystone, R. F. D. 2.....	3
Hinkle, Walter.....	Chas. Hinkle.....	Boone.....	Jamestown.....	1
Hoon, Leroy.....	Nora Hoon.....	Allen.....	Ft. Wayne, 303 Brandriff.....	7
Hubbard, Harry.....	Mollie Auten.....	Owen.....	Freedom, R. F. D. 1.....	8
Huddeson, Martin.....	Wm. Huddleson.....	Marion.....	Indianapolis, 821 Harrison.....	3
Jenkins, Raymond.....	Francis Jenkins.....	Henry.....	Middletown.....	2
Kaltofin, Victor.....	Alvin Kaltofin.....	Vanderburgh.....	Evansville, 1606 Lawrence Ave.....	10
Knight, Lewis.....	John Knight.....	Lawrence.....	Bedford, R. F. D. 1.....	3
Locke, Orrin.....	H. W. Locke.....	Marion.....	Indianapolis, 1404 Cornell Ave.....	9
McCartney, Fred.....	I. E. McCartney.....	Monroe.....	Bloomington.....	12
Maher, William.....	P. J. Maher.....	Tippecanoe.....	Lafayette, 1011 N. 7th.....	5
Mann, Marvin.....	Chas. Mann.....	Randolph.....	Spartanburg.....	1
Martin, Lawrence.....	Chas. H. Martin.....	Cass.....	Logansport.....	11
Miller, Earl.....	Henry Miller.....	Montgomery.....	Shadeland, R. F. D. 36.....	3
Neal, Stanley.....	John Neal.....	White.....	Monticello, R. F. D. 4.....	7
Nunn, Wm.....	Wm. Overland.....	Warrick.....	Chandler.....	7
Olson, Albert.....	J. L. Olson.....	Cass.....	Logansport, 2011 Spear.....	10
Overlease, Hugh.....	Henry Overlease.....	Elkhart.....	Elkhart, R. F. D. 7.....	7
Porter, Herman.....	Frank Porter.....	Lake.....	Hammond, R. F. D. 1.....	4
Rayl, John.....	Harper L. Rayl.....	Parke.....	Bloomington.....	3
Ream, Omer.....	Idona Conrad.....	Howard.....	Kokomo, 51 S. Main.....	8
Robinson, Luther.....	Colored Orphans' Home.....	Marion.....	Indianapolis.....	5
Schneider, Philip.....	William E. Schneider.....	Vanderburgh.....	Evansville, 1307 E. Franklin.....	8
Schwartz, Fred.....	Dora Lockwood.....	Vigo.....	Terre Haute, 113 N. 4th.....	3
Sedam, Cecil.....	Miss Taylor.....	Marion.....	Indianapolis Guardian Home.....	1
Sellers, Howard.....	Commodore Sellers.....	Huntington.....	Huntington, 26 Leopold.....	4

ENROLLMENT—Continued.

PUPIL'S NAME.	PARENT OR GUARDIAN.	COUNTY FROM WHICH PUPIL ENROLLED.	ADDRESS OF PUPIL.	Grade.
Shook, Herbert.	Chas. Shook.	Madison.	Elwood.	1
Smith, Henderson.	Mollie Bridgewater.	Jasper.	Vergie.	7
Stark, Frank.	Mrs. H. Huff.	Clay.	Cory.	11
Summers, Raymond.	M. M. Lamb.	Harrison.	Evans Landing.	10
Terrell, Ralph.	Morton Terrell.	Vigo.	Rockville, R. F. D. 4.	3
Thompson, Hillis.	Frank Thompson.	Marion.	Indianapolis, 1706 College.	7
Wagner, Bernard.	J. P. Wagner.	Cass.	Logansport, 212 Montgomery.	5
Wagner, Frank.	Henry Wagner.	Vigo.	Terre Haute, 1407 4th.	12
Washington, Claud.	Chas. Washington.	Warrick.	Newburg.	1
Watson, Leonard.	Wm. Watson.	Putnam.	Carpentersville.	1
Wilcox, Wilbur.	Lilla Wilcox.	Vanderburgh.	Evansville, 1526 Law.	5
Williams, Richard.	Lawson Williams.	Bartholomew.	Columbus, R. F. D. 9.	9
Wilson, Herman.	Lawson S. Wilson.	Marion.	Indianapolis.	9
Wilson, Noble.	Sidney W. Wilson.	Vigo.	Terre Haute, 536 W. 14 $\frac{1}{2}$.	9

GIRLS.

Acton, Pearl.	Mrs. D. H. Swain.	Wells.	Bluffton.	11
Allen, Della.	Robert Allen.	Knox.	Sanborn.	6
Anders, Grace.	William Anders.	Sullivan.	Sullivan.	7
Barnes, Ila.	Margaret Huff.	Whitley.	Columbia City, R. F. D. 13.	4
Breummer, Emma.	Fred Breummer.	Laporte.	Michigan City, 524 E. Boston.	10
Brown, Eunice.	John W. Brown.	Jackson.	Freetown.	2
Burk, Margaret.	Anna Burk.	Marion.	Indianapolis, 1830 Gent.	2
Byers, Helen.	Estella Byers.	Marion.	Indianapolis, 2148 Depot.	3
Carver, Bertha.	Chas. Carver.	Clinton.	Frankfort, R. F. D. 5.	7
Carey, Amanda.	Mrs. M. I. Carey.	Delaware.	Muncie, 2102 S. Elm.	11
Craig, Dorothy.	Thomas Craig.	Fulton.	Macey, R. F. D. 30.	5
Cunningham, Ada.	I. C. Cunningham.	Marion.	Indianapolis, 831 Chase.	7
Cutsinger, Alma.	W. V. Cutsinger.	Sullivan.	Shelburn.	10
Daley, Rose.	J. N. Byerley.	Harrison.	Corydon.	12
Davis, Pearl.	W. H. Davis.	Tipton.	Windfall, R. F. D. 3.	7
Dondono, Dollie.	Margaret Dondono.	Marion.	Indianapolis, 621 E. St. Clair.	1
Dugan Mary.	Geo. M. Dugan.	Marion.	Indianapolis, 1821 W. 11th.	9
Edwards, Lelia.	Chas. Edwards.	Montgomery.	Mace.	1
Estes, Ursa.	Madison Estes.	Shelby.	Shelbyville, 117 E. Walker.	6
Fisher, Hazel.	Jacob Fisher.	Parke.	Coxville, R. F. D. 2.	2
Flemming, Virginia.	Martha Hunter.	Vigo.	Terre Haute, 2132 N. 13th.	10
Fletcher, Eula.	Mary Fletcher.	Lawrence.	Huron, R. F. D. 17.	4
Foster, Lucy.	H. B. Foster.	Noble.	Albion.	3
Freed, Lassie.	Alvin Lindsay Freed.	Washington.	Campbellsburg.	4
Freed, Ophia.	L. Freed.	Washington.	Campbellsburg.	1
Gilmore, Sybil.	John Gilmore.	Marion.	Indianapolis, 2646 N. Gail.	2
Griffith, Mary.	Irvin Griffith.	Sullivan.	Shelburn.	1
Hartsock, Minnie.	A. H. Graham.	Rush.	Knightstown, S. & S. O. Home.	2
Henderson, Nora.	Lineas Henderson.	Orange.	Chambersburg.	5
Herren, Esther.	E. W. Monfort.	Marion.	Indianapolis, 110 E. Vermont.	10
Hester, Thelma.	Mrs. M. Hester.	Jay.	Redkey.	2
Hopewell, Glenn.	Mrs. A. Hopewell.	Sullivan.	Sullivan.	1
Hubbel, Dora.	Mrs. L. C. Price.	Owen.	Coal City.	10
Hunt, Edith.	Levi Hunt.	Marion.	Indianapolis, 1911 Alvord.	3
Huston, Mildred.	Elbert Huston.	Noble.	Albion.	8
Ike, Catherine.	Mary Ike.	Vigo.	Terre Haute, 206 Hancock.	3
Jamieson, Genevieve.	Oscar Jamieson.	Wayne.	E. Germantown.	2
Jenks, Fern.	W. A. Jenks.	Wabash.	N. Manchester.	11
Johnson, Ethel.	Mrs. Mary Rainboldt.	Bartholomew.	Columbus, 507 California.	1
Johnston, Claire.	A. H. Graham.	Rush.	Knightstown, S. & S. O. Home.	9

ENROLLMENT—Continued.

PUPIL'S NAME.	PARENT OR GUARDIAN.	COUNTY FROM WHICH PUPIL ENROLLED.	ADDRESS OF PUPIL.	Grade.
Keller, Lydia.....	Lewis Keller.....	Warrick.....	Boonville.....	9
Kerbox, Jessie.....	Susan Kerbox.....	Marion.....	Indianapolis, Malott Park.....	2
Lindsey, Adelaide.....	Jennie Porter.....	Grant.....	Marion.....	9
Lore, Sallie.....	Richard Lore.....	Parke.....	Rockville, R. F. D. 7.....	4
Malone, Lilly.....	Richard Malone.....	Vermillion.....	Dana, R. F. D. 2.....	3
Martin, Essie.....	Mrs. Josie Martin.....	Jennings.....	North Vernon.....	1
Matlock, Ora.....	Geo. Matlock.....	Marion.....	Indianapolis, 1425 Mass. Ave.....	9
McDonald, Hazel.....	Ed. McDonald.....	Marion.....	Indianapolis, 926 E. Georgia.....	4
Meyers, Lydia.....	Simon C. Meyers.....	Knox.....	Vincennes, Box 96.....	6
Minthorn, Nettie.....	H. R. Minthorn.....	White.....	Monticello.....	12
Murphy, Audrey.....	Geo. Murphy.....	Marion.....	Indianapolis, 125 W. 19th.....	5
Murray, Anna.....	May Murray.....	Marion.....	Indianapolis, 801 Highland Ave.....	6
Noble, Alta.....	Mrs. Mattie Noble.....	Laporte.....	Laporte, 407 Jackson.....	3
Orndorf, Mabel.....	Mrs. Tolan Orndorf.....	Marion.....	Indianapolis, 1021 Cornell.....	2
Owens, Lizzie.....	Mrs. May Owens.....	Washington.....	Salem.....	1
Owens, Wilma.....	Mrs. Myrtle Owens.....	Marion.....	Indianapolis, 416 N. East.....	5
Perry, Bertha.....	Chas. Perry.....	Marion.....	Indianapolis, 1630 Cornell.....	3
Rockett, Delia.....	Mrs. Mary Vatchet.....	Knox.....	Vincennes, 614 Prairie.....	7
Romine, Emora.....	Ovid Lawrence.....	Vigo.....	Terre Haute, R. F. D. 5.....	7
Rouch, Pearl.....	W. H. Rouch.....	Fulton.....	Rochester.....	7
Schroades, Lizzie.....	Mrs. Burkhardt.....	Spencer.....	Rockport.....	4
Schneider, Catherine.....	Wm. Schneider.....	Vanderburgh.....	Evansville, 1307 E. Franklin.....	6
Sellers, Lottie.....	Louis Sellers.....	Henry.....	Newcastle.....	1
Sheehan, Maud.....	Jerry Sheehan.....	Marion.....	Indianapolis, 544 Bell.....	3
Sheets, Jennie.....	Howard Sheets.....	Jefferson.....	Madison, 1017 Park Ave.....	1
Sheppard, Stella.....	Mrs. Margaret Sheppard.....	Henry.....	Newcastle, 825 N. 9th.....	6
Short, Jessie.....	C. E. Short.....	Clay.....	Brazil.....	6
Simcox, Lydia.....	Townsley Simcox.....	Harrison.....	Corydon.....	5
Smith, Hazel.....	Mollie Bridgewater.....	Jasper.....	Vergie.....	2
Speyer, Pauline.....	Henry Speyer.....	Marshall.....	Culver.....	4
Stafford, Lurea.....	John E. Kerr.....	Marion.....	Indianapolis, R. F. D. 18.....	2
Stiles, Rosetta.....	Mrs. Mary Miller.....	White.....	Monon.....	11
Stowell, Vera.....	Herbert Stowell.....	Marion.....	Indianapolis, 2001 Hovey.....	1
Strafner, Ethel.....	Board of Children's Guardians.....	Marion.....	Indianapolis.....	1
Swanger, May.....	Homer Swanger.....	St. Joseph.....	Mishawaka.....	8
Swanger, Myrtle.....	Homer Swanger.....	St. Joseph.....	Mishawaka.....	10
Thompson, Tressie.....	Chas. Thompson.....	Marion.....	Indianapolis, 973 W. Vermont.....	4
Tingle, Minnie.....	A. H. Graham.....	Rush.....	Knightstown, S. & S. O. Home.....	3
Trinkle, Lillie.....	Henry Trinkle.....	Orange.....	Paoli, R. F. D. 2.....	3
Voght, Grace.....	Emanuel Voght.....	Allen.....	Ft. Wayne, 302 Machnich.....	1
Wells, Erlamond.....	Geo. E. Wells.....	St. Joseph.....	South Bend, 1422 S. Main.....	1
Wiley, Genevieve.....	F. F. Wiley.....	Johnson.....	Edinburg.....	2
Willett, Martha.....	Mrs. Dora Harden.....	Warrick.....	Newburg.....	11
Wilson, Emma.....	J. C. Wilson.....	Jennings.....	Vernon, R. F. D. 2.....	8
Wilson, Julia.....	Jacob Wilson.....	Clay.....	Brazil.....	3
Whybrew, Ruby.....	Morton Whybrew.....	Grant.....	Fairmount.....	3
Wratten, Minnie.....	Wm. Brown.....	Daviess.....	Washington.....	12
Young, Aletha.....	W. H. Young.....	Rush.....	Arlington.....	12

SCHOOLS.

The schools are doing good work. The four departments closely correlate. The physical training requires from each pupil one period daily in the gymnasium in marching; in body, limb and head movements; in exercise with clubs, wands, rings and skates. It is intended to correct faulty carriage and develop as completely as possible the physical structure of the students. The Industrial Department is intended primarily to supplement and build upon the work of the gymnasium. Secondarily, the purpose is to afford a trade by which the pupil may live after graduating. The music course is comprehensive. This department is well supplied with instruments and is popular among the pupils. The work in the Literary Department has been satisfactory. The blind generally make good students. They give close attention and labor hard to make progress. All necessary apparatus for good work is supplied. On the whole the work of the schools has been satisfactory and a large per cent. of the pupils were promoted.

LITERARY DEPARTMENT.

A. C. EVENS, Principal, High School, Room 6—12s and 11s.

MABEL HAUKE, High School, Room 5—10s and 9s.

OLIVE AUGHINBAUGH, Room 4—8s and 7s.

NANNIE CRAMPTON, Room 3—6s and 5s.

MARY CATHERWOOD, Room 2—4s and 3s.

FLORENCE REYNOLDS, Room 1—2s and 1s.

All pupils in this Institution are in this department. Twelve years are required for graduation. A year's work is the amount suitable to an average pupil for five hours a day for nine months. The course of study is as near that of the public schools of the State as the necessary modifications will permit. The texts and reference books for this department are in the New York Point, the elementary characters of which are as follows:

NEW YORK POINT ALPHABET.

Capitals A ···· B :··· C ···· D :··· E ···· F ···· G ····
 H :··· I :··· J :··· K :··· L :··· M :··· N ···· O ····
 P ···· Q :··· R :··· S ···· T ···· U ···· V ···· W ····
 X :··· Y ···· Z :···

a ··· b :··· c ···· d :··· e ··· f ···· g :··· h :··· i :··· j :··· k :···
 l :··· m :··· n ···· o ···· p ···· q :··· r :··· s ···· t ···· u ···· v ····
 w ···· x :··· y ···· z :··· Number sign :··· Numerals 1 :··· 2 ···
 3 :··· 4 :··· 5 :··· 6 :··· 7 ···· 8 ···· 9 :··· 0 ··· Word and Part Word
 Signs the ··· and ···· of :··· that ···· ing :··· ch :··· on :···
 sh :··· th :··· wh :··· ph :··· gh :··· tion :··· Explanation of Punctuation
 Marks Comma · Semi-colon · Colon :··· Interrogation :··· Dash ····
 Period :··· Exclamation :··· Parenthesis :··· Quotation :··· Apostrophe :···
 Hyphen :··· \$ ···· One-half 1.2 Decimal Point ··· = :··· + ····
 — :··· × :··· ÷ :··· % ····

COURSE OF STUDY.

FIRST YEAR.

Reading.—New York Point.—Alphabet by groups of letters similar in form.
 Groups of simple words similar in form and sound selected from the
 First Reader. Primer and First Reader complete with supplemental
 work.

Spelling.—All words in the First Reader spelled orally. Special attention
 given to syllabication.

Writing.—Small letters. Sentence work commenced.

Numbers.—Numbers 1 to 10. Each number as a whole. Relations in the
 number. Numbers taken away. Fractional parts. All with objects
 real or imaginary. Drill in rapid combinations.

Language.—Correction of errors in the pupil's language. All answers to be
 given in complete statements. Exercises on "a" and "an," "is" and
 "are," and "was" and "were."

Geography.—"Seven Little Sisters."

Form.—Plane and solid forms.

Memorizing.—Simple selections from books and papers.

General Lessons.—Lessons on familiar animals, on parts of the human body
 and on the care of health.

SECOND YEAR.

Reading.—Point Second and Third Readers, Appleton's First, completed
 with supplemental work.

Spelling.—Spell all new words found in the readers—both oral and
 written spelling. Attention given to syllabication.

Writing.—Point writing. Small letters and capitals. Sentence work.

Numbers.—Numbers 10 to 50, same as in first year. Simple problems to illustrate each relation. Have pupils give simple fractional parts of numbers. Teach Roman numerals. Develop orders to ten thousands. Drill on rapid combination.

Language.—Continued as in first year. Simple lessons on forms of verbs, nouns and pronouns. Forms of sentences. Exercises in changing from one form to another. Simple lessons in letter writing.

Geography.—"Each and All."

Form.—Modeling of solid forms, and of objects related in form. Designs with plane forms.

Memorizing.—Simple selections from books and papers.

General Lessons.—Lessons on common articles of food. Lessons on animals continued.

THIRD YEAR.

Reading.—Point Fourth and Fifth Readers, Appleton's Second, completed with supplemental work.

Spelling.—Oral and written spelling—all new words found in the readers. Attention given to syllabication. General definitions of words as found in the readers.

Numbers.—Review of previous year's work by miscellaneous rapid combinations and subtraction work. Original problems. White's Elementary Arithmetic, Part I.

Language.—Sentence work. Sentences using common verbs in both singular and plural numbers. Common punctuation marks and abbreviations.

Writing.—Copy memory gems and selections read by the teacher in addition to the written work of other recitations. Letter writing.

Geography.—"World and Its People, No. 3."

Memorizing.—Suitable selections from books, papers and magazines.

General Lessons.—Lessons on the human body and on plants and animals.

FOURTH YEAR.

Reading.—Point Sixth Reader, Appleton's Third, completed with supplemental work.

Spelling.—Same as in third year.

Numbers.—White's Elementary Arithmetic, Part II.

Language.—Sentence work continued. Subject and predicate. Plurals and possessives. Principal parts of verbs in general use. Simple compositions on common subjects and about familiar objects. Letter writing.

Writing.—Same as in third year.

Geography.—"Brooks and Brook Basins."

Memorizing.—Same as in the third year.

General Lessons.—The work of the third year elaborated.

FIFTH YEAR.

Reading.—Point Seventh Reader, Appleton's Fourth, with supplemental work.

Spelling.—Oral and written spelling—all new words in the reader. Definitions.

Numbers.—White's Elementary Arithmetic, Part III, to Denominate Numbers.

Language.—Reed & Kellogg's Graded Lessons in English to lesson 71.

Writing.—Copy work indicated by the teacher in addition to spelling and language work.

Geography.—Elementary Geography—Indiana Educational Series—to South America. United States studied with dissected map.

History.—"Stories of Our Country."

SIXTH YEAR.

Reading.—Point Eighth Reader. Appleton's Fifth, with supplemental work.

Spelling.—Same as in the fifth year.

Numbers.—White's Elementary Arithmetic completed.

Language.—Reed & Kellogg's Graded Lessons in English from lesson 71 to page 156.

Writing.—Same as in the fifth year.

Geography.—Elementary Geography—Indiana Educational Series—begin with South America, Asia and Africa in general, and Europe with dissected map.

History.—"From Colony to Commonwealth."

SEVENTH YEAR.

Arithmetic.—White's Complete Arithmetic from fractions to interest.

Grammar.—Reed & Kellogg's Higher Lessons in English from lesson 10 to lesson 85. Much attention should be given to composition work.

Geography.—Complete Geography—Indiana Educational Series—study South America and Asia with dissected maps and review the United States.

History.—"Eggleston's History of the United States" read to the class during the year.

Note.—Spelling should be continued throughout the course in connection with other subjects.

EIGHTH YEAR.

Arithmetic.—White's Complete Arithmetic from interest to the appendix.

Grammar.—Reed & Kellogg's Higher Lessons in English from lesson 85 to lesson 139. Composition work continued.

History.—Barnes' History of the United States.

Physiology.—Steele's Physiology.

HIGH SCHOOL COURSE.

NINTH YEAR.	Algebra.	Composition and Rhetoric.	Civil Government.	Physical Geography.	Music or Industries.
	Algebra.	Composition and Rhetoric.	Civil Government.	Physical Geography.	Music or Industries.
TENTH YEAR.	Algebra.	American Literature.	General History.	Physics.	Music or Industries.
	Algebra.	American Literature.	General History.	Physics.	Music or Industries.
ELEVENTH YEAR.	Geometry.	English Literature.	General History.	Sociology.	Latin, Music or Industries.
	Geometry.	English Literature.	General History.	Sociology.	Latin, Music or Industries.
TWELFTH YEAR.	Geometry.	English Literature.	English History.	Psychology.	Latin, Music or Industries.
	Geometry.	English Literature.	English History.	Psychology.	Latin, Music or Industries.

Forty credits are necessary to graduate from the Literary High School Department. A credit is one-half year's work of one period of recitation daily for five days in a week with necessary preparation. At the end of the eighth year the pupil may elect the industrial, literary or music course.

HIGH SCHOOL TEXT BOOKS.

Ninth Year—

Algebra—Peck.
Composition and Rhetoric—Wady.
Civil Government—Fiske.
Physical Geography—Maury.

Tenth Year—

Algebra—Peck.
Literature—Reed & Kellogg.
Ancient History—Botsford.
Physics—Gage.

Eleventh Year—

Geometry—Wells.
Sociology—Giddings.
General History—Barnes.
Literature—Reed & Kellogg.

Twelfth Year—

Psychology—James.
English History—Montgomery.
Literature—Reed & Kellogg.
Geometry—Wells.

PROGRAM OF LITERARY WORK AND RECITATIONS.

COMMENCES.	REYNOLDS, Room I.	CATHERWOOD, Room II.	CRAMPTON Room III.	AUGHINBAUGH, Room IV.	HAUK, Room V.	EYENS, Room VI.	CLOSES.
8:45	CHAPEL EXERCISES.						9:00
9:00	Numbers, 2s.	Numbers, 4s.	Arithmetic, 6s.	Arithmetic, 8s. Aughinbaugh.	English Literature, 11s and 12s.		9:30
9:30	Numbers, 1s.	Numbers, 3s.	Arithmetic, 5s.	Arithmetic, 7s. Aughinbaugh.	Algebra, 9s.	Geometry, 11s.	10:00
10:00	Language, 2s.	Language, 3s.	Reading, 5s.			Algebra, 10s.	10:30
10:40	Reading, 2s.	Reading, 4s.	Reading, 6s.	History, 8s. Hauk.		Geometry, 12s.	11:15
11:15	Reading, 1s.	Reading, 3s.		History, 7s. Aughinbaugh.	American History, 10s and 11s.	English History, 9s and 12s.	11:45
1:15		Language, 4s.	Grammar, 6s.	Grammar, 8s. Aughinbaugh.		Physics, 9s and 10s.	1:45
1:45	Language, 1s.		Grammar, 5s.	Grammar, 7s. Aughinbaugh.	Psychology, 11s and 12s.		2:15
2:25	Science, 2s and 1s.	Science, 4s and 3s.	Geography, 6s and 5s.	Geography, 8s. Aughinbaugh.			3:00
3:00	Reading, 2s and 1s.	Reading, 4s and 3s.	Reading, 6s and 5s.	Geography, 7s. Aughinbaugh.	American Literature, 9s and 10s.		3:30
6:15 P. M.	Reading, 7s, 8s, 9s, 10s, 11s and 12s.						7:00 P. M.

MUSIC DEPARTMENT.

ADELAIDE CARMAN, Principal, Piano and Pipe Organ.

WM. T. SHANNON, Piano and Harmony.

LULU A. FISHER, Voice.

BERTHA SCHELLSCHMIDT, Violin and Mandolin.

In this department all pupils of the Institution are not given work. All may be admitted, but only those retained who demonstrate considerable capacity. It is not the purpose to burden this department with pupils who have little capacity or taste for music. The chorus classes are the ones most general, but even in this it is useless to retain pupils who have no ability in this line of work. Individual lessons are given to those only who have shown considerable promise of success.

Chorus work is required throughout the entire course from pupils qualified for this. At the eighth year, when pupils have shown sufficient ability and progress, they are given voice and organ work.

The following is the course of study planned for the music department:

PIANO.**FIRST YEAR.**

Position of body and hands at piano. A knowledge of braille music. Beginning technical exercises (etudes, legato and staccato, phrasing, etc.). First half of Grade 1, National Graded Course. Recital work (1).

SECOND YEAR.

Technical work. Five finger exercises. Preparatory scale work. First half of Grade 1. Little pieces by Lichner, Crosby, Adams and Dennee, and others (2). Recital work (2).

THIRD YEAR.

Technical work. Five finger exercises all keys and forms, contrary motion, single and double notes. All scales Major and Minor. First half of Grade 2. Sonatinas by Clementi and Kullak (1). Pieces by Hiller, Spindler, Lichner, Reinecek, Loeshorn, Geise and others (2). Recital work (2).

FOURTH YEAR.

Technical work. Preparatory arpeggio work. Preparatory chord work. Scale practice for speed.

Complete second grade. Etudes for Heller, Cramer, Duvernoy, Loeshorn and others (2). Pieces by Heller, Jensen, Bohm, Gade, Schumann (3). Sonatinas from Clementi and Mozart (1). Two hymns. Ensemble work. Recital work (2).

FIFTH YEAR.

Technical work. Progressive scale, arpeggio and chord study. Preparatory octave work.

First half of Grade 3. Etudes by Heller, Loeshorn, Czerny, Cramer and others (2). Pieces by Mendelssohn, Gade, Jadassohn, Jensen, Grieg, Schumann, Bendel and others (2). Easy preludes by Bach (1). Two hymns. Ensemble work. Recital work (2).

SIXTH YEAR.

Technical work. Advanced study in scale, arpeggio and chord forms. Progressive octave work.

Complete Grade 3. Beginning work on Sonatas (1). Bach's Inventions (1). Field Nocturnes (1). Pieces from Hofmann, Kargenoff, Nevin, Moszkowski, Scharwenka, Schumann, Chopin and others (3). Three hymns. Ensemble work. Recital work.

HIGH SCHOOL COURSE—FIRST YEAR.

Careful study of the first half of Leschetizky's method. Bach's Inventions (2). Sonatas by Mozart and Beethoven (1). Etudes from Chopin, Heller, Moscheles and others (2). Pieces from Chopin, Chaminade, Mendelssohn, MacDowell, Schumann, Grieg, Brahms and others (3). Chapel work (six hymns). Recital work (2).

SECOND YEAR.

Complete Leschetizky's work. Bach's Inventions (2). Beethoven Sonatas (1). Six selected etudes and pieces from standard writers. Chapel work (six hymns). One Concerto or two piano numbers. Recital work. (2).

THIRD YEAR.

Careful study of Doerner's technical work. Bach Preludes and Fugues (1). One Sonata or Concerto. One accompaniment to song or violin for recital. Three selected pieces or etudes. Chapel work (six hymns). Recital work (2).

FOURTH YEAR.

Applied Technic (teaching of two pupils under supervision). Four compositions from modern composers. Chapel work (two anthems). Recital work.

One composition learned without aid of teacher in two months for recital.

Graduating recital.

VOICE.**HIGH SCHOOL COURSE—FIRST YEAR.**

Reading of braille. Position of body and mouth. Position of tongue. Breathing method explained. Single tone work. Simple studies in intervals. Diatonic scales. First twenty-five lessons in Concone. Two simple songs. Recital work (1).

SECOND YEAR.

Studies for sustaining the breath. Correct intonation on mingling of tones. Advanced studies in intervals, Major and Minor. Chromatic scale. Phrasing of words. Last twenty-five Concone. Five songs. Recital work (2).

THIRD YEAR.

Positions of vowels and consonants. Scale work for clearness, speed, and smoothness. Exercises in arpeggio and syncopation. Advanced studies from Abt, Sieber and others. Seven songs from American composers. Recital work (2).

FOURTH YEAR.

Combination of position of tones and words in the mouth. Advanced studies in embellishments. Songs from the classics, Schumann, Schubert and others (10). Graduating recital.

VIOLIN.**FIRST YEAR.**

Position of violin and bow. Reading of braille. Elementary finger exercises. Dancla violin method (4). Harvest of flowers, collection of easy pieces (2). Recital work (1).

SECOND YEAR.

Scale work. Exercises for wrist. First book of Wohlfahrt studies. Elementary work in third position. Easy solos by Sitt, Herrmann, Dancla, Demuth, Harris, Palaschko, Allen and others (2). Recital work (2).

THIRD YEAR.

Scales in third position. Easy technical studies for bowing. First book of Kayser etudes. Solos from Becker, Hauser, Fischer, Cooper, Papini, Dancla, Raff, Bohm and others (4). Recital work (2). Chapel work (six hymns).

FOURTH YEAR.

Second and fifth positions. Technical studies in scales and thirds. Kayser etudes, second book, first half. Beginning ensemble work. Solos from Thome, Schumann, Accolay, Raff and others (4). Recital work (2). Chapel work (six hymns). One sonata.

FIFTH YEAR.

Fourth and sixth positions. Technical studies in positions and octaves. One concertino. Second half of Kayser's etudes Op. 20. Solos by Seitz, Bohm, Schumann, Goddard, Borowski, Raff, Seybold and others (5). Ensemble work. Chapel work (six hymns). Recital work (2).

SIXTH YEAR.

All positions required. First book of Marza's etudes. Advanced technical studies for bowing. One easy concerto. Solos by Henri, Ern, Hauser, Sitt, Singelee, Papini and others (5). Chapel work (six hymns). Recital work (2).

HIGH SCHOOL COURSE—FIRST YEAR.

Schradieck's method of scales. Mazas etudes, Book 2. Study of arpeggios and chords. Solos by Simonetti, Schumann, Wieniawski, Viotti and others (6). Chapel work (six hymns). Recital work (2).

SECOND YEAR.

Schradieck's technical studies, Book 1. Mazas etudes (2). Kreutzer etudes (1). One sonata from Mozart or Haydn. Solos by Vieuxtemps, DeBeriot, Bazzini, or the old Italian School (2). Chapel work (six hymns). Recital work (2).

THIRD YEAR.

Schradieck's technical studies, Book 2. Kreutzer and Fiorillo etudes (2). One Bach study. One concerto by DeBeriot, Viotti, or Rode. One obligato to a song. One solo by any of the above composers. Chapel work (six hymns). Recital (2).

FOURTH YEAR.

Schradieck's technical studies. Kreutzer and Fiorillo and Rode's etudes (2). One Beethoven or Corelli sonata. One solo by a modern composer. Solos by Hubay, Vieuxtemps, Saint-Saens, Leonard, DeBeriot, Spohr, or some modern composer (1). One composition learned alone in two months. Must teach two pupils. Graduating recital.

ORGAN.

HIGH SCHOOL COURSE—FIRST YEAR.

Pupil must have at least five years of piano and read braille music. Position at organ. Arrangement of organ and mechanical appliances. Name, character and position of stops. Stainer organ method (six studies). Technical work for pedals. Two hymns. Recital work (1).

SECOND YEAR.

Complete Stainer method. Pedal studies by Dudley Buck (3). Four hymns. One anthem. Two pieces. Chapel work. Ensemble work. Recital work (2).

THIRD YEAR.

Dudley Buck pedal studies (complete). Bach easy preludes and fugues (2). Six hymns. Three anthems. Four selected pieces. Chapel work. Recital work (2).

FOURTH YEAR.

Bach prelude and fugue (1). Four selected pieces. One concerto or sonata. Six hymns. Four anthems. One composition learned alone in two months. Graduating recital.

CHORUS WORK.

Senior Choir—Two standard hymns. Four anthems. Four mixed choruses. One chorus from an opera or an oratorio or a complete cantata. Special songs for Thanksgiving, Christmas and Easter.

Junior Choir—Ten hymns. Season songs. Songs for two and three part study. Special songs for Thanksgiving, Christmas and Easter. Appear twice in recital work.

MANDOLIN COURSE.

FIRST YEAR.

Reading braille. Finger exercises. Scale work. Easy solos (1). Recital (1).

SECOND YEAR.

First Book Henlein Method. Scale work. Technical studies. Solos (2). Recital (1).

THIRD YEAR.

First half of Second Henlein Method. Technical studies in third. Third and fifth positions. Solos by Lange, Tobani, Mascagni, etc. (2). Recitals (2).

FOURTH YEAR.

Second half of Second Henlein Method. Technical studies in third. Third and fifth positions. Solos by Lewis, Tobani, Singelee, Gillet (2). Concerted work (one composition). Recitals (2).

FIFTH YEAR.

Technical studies in third and sixth. All major and minor scales. All positions. Concerted work (one composition). Solos by Lewis, Singelee, or any modern composer (3). Recitals (2).

HIGH SCHOOL MUSIC.

	ONE REQUIRED.	ONE ELECTIVE.	REQUIRED.	REQUIRED.	ELECTIVE.
FIRST YEAR.	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	Theory and Chorus.	Recital Work.	Literary or Industrial.
	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	Theory and Chorus.	Recital Work.	Literary or Industrial.
SECOND YEAR.	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	Theory and Chorus.	Recital Work.	Literary or Industrial.
	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	Theory and Chorus.	Recital Work.	Literary or Industrial.
THIRD YEAR.	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	History and Chorus.	Recital and Chapel Work.	Literary or Industrial.
	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	History and Chorus.	Recital and Chapel Work.	Literary or Industrial.
FOURTH YEAR.	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	Normal Work and Chorus.	Chapel Work.	Literary or Industrial.
	Piano, Voice, Organ, Violin.	Piano, Mandolin, Voice, Flute, Organ, Clarinet, Violin, Horn.	Normal Work and Chorus.	Graduating Recital.	Literary or Industrial.

To graduate from the Music Department a student must meet the requirements of the High School Course, having carried the necessary preparatory work through the grades of this school or its equivalent in other schools.

Organ study must be preceded by at least five years' piano work. Chorus training is required throughout the entire school course unless the student is unable to sing.

Forty credits are necessary to graduate. A credit equals one-half years' work of one recitation period daily with necessary preparation.

PROGRAM OF MUSIC DEPARTMENT.

SCHEDULE OF TEACHERS' AND PUPILS' HOURS.

Monday.

Commences.	CARMAN.	SHANNON.	FISHER.	SCHIELSCHMIDT.	Closes
7:45				Elliott.	8:15
8:00	Chorus.	Harrison.	Chorus.		8:40
8:15				Huston.	8:40
8:40	Chapel.	Chapel.	Chapel.	Chapel.	9:00
9:00		Rouch.	Dugan.	Keller.	9:30
9:30	Young.	Speyer.	Freed.	Schneider.	10:00
10:00	Flemming.	Huston.	Stiles.	Carver.	10:30
10:40		Schwartz.	Carey.	Willett.	11:15
11:15		Bales.		Thompson.	11:45
12:45				Brown.	1:15
1:15	Wilson, N.	Clark and Rayl.	Addington.	Glascocock.	1:45
1:45	Wilson, H.	Schneider, P.	Overlease.	Terrell.	2:15
2:25	Thompson.	Brown and Mayer.	Anders.	Kaltofin.	3:00
3:00				Hubbard.	3:30

PROGRAM OF MUSIC DEPARTMENT—Continued.

Tuesday.

Commences.	CARMAN.	SHANNON.	FISHER.	SHELLSCHMIDT.	Closes.
7:45				Dugan.	8:15
8:00			Murphy.		8:40
8:15				Quartette.	8:40
8:40	Chapel.	Chapel.	Chapel.	Chapel.	9:00
9:00	Supervision.	Kaltofin.	Carver.	Cunningham.	9:30
9:30	Wiley.	Sellers.			10:00
10:00	Flemming.	Porter.	Lindsey.	Allen, D.	10:30
10:40	Keller.	Ike.	Willett.	Carey.	11:15
11:15		Craig.	Young.		11:45
12:45				Clark.	1:15
1:15	Glascock.	Cockeram.		Bevins.	1:45
1:45	Wilson, H.	Schneider, P.	Hubbard.	Allen.	2:15
2:25	Thompson and Clark.	Rayl and Brown.	Olson.	Hoon.	3:00

PROGRAM OF MUSIC DEPARTMENT—Continued.

Wednesday.

Commences.	CARMAN.	SHANNON.	FISHER.	SHELLSCHMIDT.	Closes.
8:00	Chorus.	McCartney.			8:40
8:40	Chapel.	Chapel.	Chapel.		9:00
9:00	Transcribing Music.	Transcribing Music.	Sheehan.		9:30
9:30	Transcribing Music.	Transcribing Music.	Daley.		10:00
10:00	Transcribing Music.	Transcribing Music.	Schroades.		10:30
10:40	Transcribing Music.	Transcribing Music.	Murphy.		11:15
11:15					11:45
1:15	Transcribing Music.	Transcribing Music.	Wagner.		1:45
1:45	Transcribing Music.	Transcribing Music.	Browning.		2:15
2:25					3:00

PROGRAM OF MUSIC DEPARTMENT—Continued.

Thursday.

Commences.	CARMAN.	SHANNON.	FISHER.	SCHILLSCHMIDT.	Closes.
7:45				Elliott.	8:15
8:00	Chorus.	History Class.	Chorus.		8:40
8:15				Huston.	8:40
8:40	Chapel.	Chapel.	Chapel.	Chapel.	9:00
9:00		Rouch.	Dugan.	Keller.	9:30
9:30	Young.	Speyer.	Lindsey.	Schneider.	10:00
10:00	Flemming.	Huston.	Stiles.	Carver.	10:30
10:40	Kaltofin.	Schwartz.	Carey.	Willett.	11:15
11:15		Bales.		Thompson.	11:45
12:45				Brown.	1:15
1:15	Wilson, N.	Clark.	Addington.	Glasecock.	1:45
1:45	Wilson, H.	Schneider.	Olson.	Terrell.	2:15
2:25	Thompson.	Brown.	Martin.	Kaltofin.	3:00
3:00				Hubbard.	3:30

PROGRAM OF MUSIC DEPARTMENT—Continued

Friday.

Commences.	CARMAN.	SHANNON.	FISHER.	SCHHELLSCHMIDT.	Closes.
7:45				Dugan.	8:15
8:00	Chorus.	Harrison and McCartney.	Murphy.		8:40
8:15				Quartette.	8:40
8:40	Chapel.	Chapel.	Chapel.	Chapel.	9:00
9:00	Supervision.	Kaltofin.	Carver.	Cunningham.	9:30
9:30	Wiley.	Sellers.			10:00
10:00	Flemming.	Porter.	Lindsey.	Allen, D.	10:30
10:40	Keller.	Ike.	Willett.	Carey.	11:15
11:15		Craig.	Young.		11:45
1:15	Glascok.	Cockeram.			1:45
1:45	Wilson.	Schneider, P.	Hubbard.		2:15
2:25	Thompson and Clark.	Brown.			3:00

The Braille Print is used in this department. The elementary characters are as follows:

BRAILLE MUSICAL ALPHABET.

	C	D	E	F	G	A	B
Wholes or 16ths,							
Halves or 32ds,							
Quarters or 64ths,							
Eighths or 128ths,							
Octave signs,	1 	2 	3 	4 	5 	6 	7
Fingering signs,	1 	2 	3 	4 	5 	6 	7
Rests,							
Accidentals,							
Intervals,	2d 	3d 	4th 	5th 	6th 	7th 	8th
slur		in accord with 	turn 	grace note 	trill 		
repeat		staccato 	dot 	double dot 			
double bar		double bar with repeat 	pause 	right hand m. 	d. 	left hand m. 	g.

Expression marks are represented by the abbreviations ordinarily used in music for the seeing. Characters standing for letters must be preceded by the word sign (

RECITALS ON EACH OF THE FOLLOWING DAYS AT 3:00 P. M.

October 22, 1907.
 November 5, 1907.
 November 19, 1907.
 December 3, 1907.
 December 17, 1907.
 January 6, 1908.
 January 20, 1908.
 February 3, 1908.
 February 17, 1908.
 March 3, 1908.
 March 17, 1908.
 March 31, 1908.
 April 7, 1908.
 April 21, 1908.

INDUSTRIAL DEPARTMENT.

CHAS. B. KEELER, Broom and Chair Shop.
 CARA B. FRENCH, Girls' Sewing Room.
 B. F. SMITH, Piano Tuning.
 WILLIAM RHOADES, Sloyd.

Chair a. m. and Broom and Sloyd p. m.

The Industrial Department is of general interest to the blind. The principal trades taught are broom making, chair caning, piano tuning, sewing, crocheting, ornamental bead work and basket making. This year the following articles were manufactured:

House brooms	966
Factory brooms	36
Whisk brooms	132
Chairs caned	97
Pillow cases	50
Sheets	113
Towels	86
Napkins	131
Girls' waists	1
Pieces underclothing	2
Scarfs	6
Hoods	3
Slippers (pairs)	10
Baby jackets	8
Small things made with needle and hook	50
Table cloths	39
Raffia and rattan baskets	30
Gymnasium suits	48
Bead work	50

Diplomas will be given from the Industrial Department upon the fulfillment of the following requirements:

I. The completion of the work of the eight grades in the literary department.

II. The completion of the work indicated in the following schedule:

	INDUSTRIAL—TWO PERIODS DAILY.	ELECTIVE—THREE PERIODS DAILY.
NINTH YEAR.	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.
	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.
TENTH YEAR.	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.
	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.
ELEVENTH YEAR.	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.
	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.
TWELFTH YEAR.	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.
	Piano Tuning, or Boys' Workshop, or Girls' Workroom.	Music or Literary.

PROGRAM OF PHYSICAL TRAINING CLASSES

COMMENCES.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	CLOSES.
9:00	Free exercises.	Free exercises.	Free exercises.	Free exercises.	Free exercises.	9:30
9:30	Free exercises.	Free exercises.	Free exercises.	Free exercises.	Free exercises.	10:00
10:00	Free exercises.	Free exercises.	Free exercises.	Free exercises.	Free exercises.	10:30
10:40	3s, 5s, 7s, and 9s, girls. Aughinbaugh.	3s, 5s, 7s, and 9s, girls. Aughinbaugh.	3s, 5s, 7s and 9s, girls. Aughinbaugh.	3s, 5s, 7s and 9s, girls. Aughinbaugh.	3s, 5s, 7s and 9s, girls. Aughinbaugh.	11:15
11:15	4s, 6s and 8s. Crampton.	4s, 6s and 8s. Crampton.	4s, 6s and 8s. Crampton.	4s, 6s and 8s. Crampton.	4s, 6s and 8s. Crampton.	11:45
1:15	1s, girls and boys. Reynolds.	1s, girls and boys. Reynolds.	1s, girls and boys. Reynolds.	1s, girls and boys. Reynolds.	1s, girls and boys. Reynolds.	1:45
1:45	2s, girls and boys. Catherwood.	2s, girls and boys. Catherwood.	2s, girls and boys. Catherwood.	2s, girls and boys. Catherwood.	2s, girls and boys. Catherwood.	2:15
2:25	9s, 10s, 11s and 12s, girls. Hauk.	9s, 10s, 11s and 12s, girls. Hauk.	9s, 10s, 11s and 12s, girls. Hauk.	9s, 10s, 11s and 12s, girls. Hauk.	9s, 10s, 11s and 12s, girls. Hauk.	3:00
3:30	Free exercises.	Free exercises.	Free exercises.	Free exercises.	Free exercises.	4:00
6:15	3s, 4s, 5s and 6s, boys. Kelly.	3s, 4s, 5s and 6s, boys. Kelly.	3s, 4s, 5s and 6s, boys. Kelly.	3s, 4s, 5s and 6s, boys. Kelly.	3s, 4s, 5s and 6s, boys. Kelly.	7:00
7:00	7s, 8s, 9s, 10s, 11s and 12s, boys. Kelly.	7s, 8s, 9s, 10s, 11s and 12s, boys. Kelly.	7s, 8s, 9s, 10s, 11s and 12s, boys. Kelly.	7s, 8s, 9s, 10s, 11s and 12s, boys. Kelly.	7s, 8s, 9s, 10s, 11s and 12s, boys. Kelly.	7:45

CLASSIFICATION OF PUPILS PRESENT OCTOBER 1, 1907, SHOWING NUMBER OF YEARS IN WORK.

ADMITTED.	PUPIL'S NAME.	Grade in Literary Department.	Choir.	Preparatory Class.	Piano.	Voice.	Violin.	Clarinet.	Mandolin.	Organ.	Horn.	Cello.	Oboe.	Bassoon.	Broom Shop.	Cane Shop.	Work Room.	Sloyd.	Piano Tuning.	Physical Training.
Sept. 27, 1906	Ambler, Wessie	3	1																	4
Sept. 25, 1907	Christman, Herbert	3	1																	4
Sept. 25, 1907	Dann, Carl	3	1																	4
Sept. 28, 1904	Dondono, Dollie	3	1																	4
Sept. 28, 1904	Edwards, Lella	3	1																	4
Nov. 17, 1904	Flemming, Glen	3	1																	4
Nov. 25, 1907	Freed, Ophia	3	1																	4
Nov. 25, 1907	Griffith, Mary	3	1																	4
Sept. 28, 1904	Hinkle, Walter	3	1																	4
Sept. 27, 1905	Hopewell, Glen	3	1																	4
Sept. 25, 1907	Johnson, Ethel	3	1																	4
Oct. 5, 1905	Martin, Essie	3	1																	4
Sept. 25, 1907	Mann, Marvin	3	1																	4
Sept. 26, 1906	Owens, Lizzie	3	1																	4
Sept. 23, 1907	Sheets, Jennie	3	1																	4
Sept. 26, 1906	Shook, Herbert	3	1																	4
Sept. 25, 1907	Stratner, Ethel	3	1																	4
Sept. 25, 1907	Stowell, Vera	3	1																	4
Sept. 25, 1907	Voght, Grace	3	1																	4
Sept. 25, 1907	Washington, Claud	3	1																	4
Sept. 25, 1907	Watson, Leonard	3	1																	4
Sept. 25, 1907	Wells, Eriamond	3	1																	4
Oct. 10, 1904	Bevens, Isaac	3	1																	4
Sept. 20, 1906	Buck, Margaret	3	1																	4
Sept. 28, 1901	Dempsey, Ora	3	1																	4
Sept. 28, 1904	Fisher, Hazel	3	1																	4
Sept. 28, 1904	Gilmore, Sybil	3	1																	4
Sept. 27, 1905	Hartscock, Minnie	3	1																	4
Sept. 27, 1906	Jameson, Genevieve	3	1																	4
Sept. 27, 1906	Kerbox, Jessie	3	1																	4
Sept. 24, 1904	Orndorff, Mabel	3	1																	4
Sept. 27, 1906	Stafford, Lurea	3	1																	4
Sept. 28, 1905	Wiley, Genevieve	3	1																	4
Sept. 28, 1905	Byers, Helen	3	1																	4
Sept. 27, 1903	Crume, Levi	3	1																	4

CLASSIFICATION OF PUPILS PRESENT OCTOBER 1, 1907—Continued.

ADMITTED	Pupil's NAME.	Grade in Literary Department	Choir	Preparatory Class	Piano	Voice	Violin	Clarinet	Flute	Mandolin	Organ	Horn	Cello	Oboe	Bassoon	Broom Shop.	Cane Shop.	Work Room.	Sloyd.	Piano Tuning.	Physical Training.
Sept. 27, 1906	Day, Orville	3														1	1	3	1		2
Sept. 20, 1904	Dicks, Nathan	3														1	1	4			4
Sept. 27, 1905	Elliott, Earl	3	3													1	1	1			4
Sept. 28, 1904	Foster, Lucy	3	1													1	1	3			3
Sept. 20, 1900	Herring, Ruby	3														1	1	1			4
Sept. 25, 1907	Hunt, Edith	3																1			1
Sept. 27, 1905	Ike, Catherine	3	2		1													3			3
Oct. 9, 1905	Malone, Lily	3														2	2	2	2		4
Jan. 5, 1900	Miller, Earl	3	1									1				1	1	1			3
Nov. 18, 1906	Rayl, John	3	3						1							1	1	4			4
Sept. 27, 1906	Schwartz, Fred	3	3													1	1	1			3
Sept. 17, 1904	Sheehan, Maud	3	3		1		1									1	1	1			4
Sept. 24, 1902	Terrill, Ralph	3	3															2			2
Sept. 25, 1907	Tingle, Minnie	3	1															1			1
Sept. 27, 1905	Trinkle, Lillie	3																4			4
Sept. 28, 1904	Whybrew, Ruby	3	3		1													1			1
Sept. 25, 1907	Wilson, Julia	3	1			1												1			3
Sept. 28, 1904	Allen, Robert	4	1		2											2	5	6	3		4
Nov. 5, 1900	Anders, Floyd	4										1									4
Sept. 12, 1894	Bales, Goldy	4	4																		4
Sept. 28, 1904	Barnes, Ida	4	2																		4
Sept. 24, 1902	Brown, Irving	4	4									1					2	4			4
Sept. 27, 1905	Dunn, Everett	4														1	3	3			3
Sept. 20, 1899	Fletcher, Eula	4																4			4
Sept. 28, 1904	Freed, Lizzie	4	4		2											5	5	4			4
Sept. 24, 1901	Gimlich, August	4																7			3
Oct. 28, 1901	Lore, Sallie	4																8			4
Sept. 24, 1900	McDonald, Hazel	4	4															6			4
Nov. 8, 1904	Porter, Herman	4	3					1								1	1	3			4
Sept. 28, 1904	Schroades, Lizzie	4	4		2											1	1	1			4
Sept. 28, 1904	Sellers, Howard	4	4						1							1	1	4			4
Sept. 28, 1904	Speyer, Pauline	4	4		3													4			4
Sept. 28, 1904	Thompson, Tressie	4	4				3											4			4
Sept. 23, 1903	Bussing, Armand	5	2					3								2	3	5	3		4
Nov. 3, 1903	Cockerham, Homer	5												2							4

CLASSIFICATION OF PUPILS PRESENT OCTOBER 1, 1907—Continued.

ADMITTED.	Pupil's Name.	Grade in Literary Department.	Choir.	Preparatory Class.	Piano.	Voice.	Violin.	Clarinet.	Flute.	Mandolin.	Organ.	Horn.	Cello.	Oboe.	Bassoon.	Broom Shop.	Cane Shop.	Work Room.	Sloyd.	Piano Tuning.	Physical Training.
Nov. 2, 1899	Bradway, Edgar.	11	7	..	..	..	4	..	..	..	..	..	..	..	..	4	..	10	1	3	7
Sept. 11, 1895	Carey, Amanda.	11	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	7
Sept. 14, 1896	Jenks, Fern.	11	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	3	5	7
May 7, 1895	Stark, Frank.	11	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	9	..	..	7
May 7, 1895	Stark, Frank.	11	9	..	..	4	6	..	..	..	..	..	..	..	..	7	..	8	3	4	9
Sept. 19, 1896	Stiles, Rosetta.	11	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	7
Oct. 15, 1896	Willett, Martha.	11	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	..	7
Sept. 24, 1902	Chadwick, Chas.	11	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	7
Sept. 24, 1898	Daley, Rose.	12	5	..	..	1	..	..	..	..	..	..	..	..	2	..	..	10	3	7	7
Sept. 24, 1895	McCartney, Fred.	12	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	8	7
Sept. 30, 1895	McCartney, Nettie.	12	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	3	..	7
Nov. 21, 1892	Minthorn, Frank.	12	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	3	..	7
Sept. 12, 1894	Wagner, Frank.	12	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	3	..	7
Jan. 27, 1892	Wratten, Minnie.	12	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	3	..	7
Sept. 12, 1894	Young, Aletha.	12	9	..	..	4	..	..	..	..	..	..	..	..	..	..	..	6	..	6	7

GENERAL READING.

Each school day for a period of forty-five minutes the teachers read from selected works to each grade.

The list of books is here given for the High School and Grades 7 and 8:

Fuene Aram.....Lytton	Last of the Barons.....Lytton	Harold.....Lytton
The Sisters.....Ebers	An Egyptian Princess.....Ebers	Cleopatra.....Ebers
Rob Roy.....Scott	Waverly.....Scott	Marmion.....Scott
A Princess of Thule.....Black	In Far Lochaber.....Black	A Daughter of Heth.....Black
Malcolm.....MacDonald	The Marquis of Lossie—MacDonald	Alec Forbes.....MacDonald
Treasure Island.....Stevenson	Kidnapped.....Stevenson	David Balfour.....Stevenson
Hunchback of Notre Dame...Hugo	Toilers of the Sea.....Hugo	Les Miserables.....Hugo
Romola.....Eliot	Felix Holt.....Eliot	Mill on the Floss.....Eliot
Tale of Two Cities.....Dickens	Cricket on the Hearth...Dickens	Nicholas Nickleby.....Dickens
Red Rover.....Cooper	Pilot.....Cooper	Pioneer.....Cooper
Hypatia.....Kingsley	Prince of India.....Wallace	Corinne.....DeStael
Cymbeline.....Shakespeare	Timon of Athens....Shakespeare	Coriolanus.....Shakespeare

GRADUATES' FUND.

In many cases pupils who have graduated from this Institution have not means to commence business. The cost of machinery and supplies for the shop is not great, but in many instances wholly beyond the reach of the graduates. Several attempts have been made to establish a fund to help worthy graduates. The following exhibit gives sources of this fund and the number of pupils assisted, as shown by the reports of the superintendents:

From unknown, January 27, 1862.....	\$100 00
From Silar Bond, May 11, 1863.....	27 16
From Mrs. Fitzpatrick, July 24, 1865.....	573 77
From unknown	99 25
<hr/>	
Total	\$800 18
Earnings to Sept. 30, 1907.....	1,214 47
<hr/>	
Total to above date	\$2,014 65
Paid for machines for sixty-one graduates to Sept. 30, 1907.....	1,164 96
<hr/>	
Balance	\$849 69

EARNINGS.

The earnings of the Institution are necessarily small, about the only source being the Industrial Department. As the purpose in this is to teach some form of industrial work to each pupil for relaxation, for physical development and for future use, and these pupils, as soon as they become proficient, generally engage in work for themselves, the finished output of the department is small. The total receipts for the past fiscal year were \$284.30.

FINANCIAL.

Receipts and disbursements for the fiscal year ending September 30, 1907.

RECEIPTS AND DISBURSEMENTS ON ACCOUNT OF MAINTENANCE.

Auditor's warrants on the State treasury—

1906.	Receipts.	Disbursements.
November	\$3,729 18	\$3,729 18
December	3,764 33	3,764 33
<hr/>		
1907.		
January	3,516 50	3,516 50
February	3,231 30	3,231 30
March	3,272 12	3,272 12
April	3,768 05	3,758 05
May	3,423 94	3,433 94
June	1,266 99	1,266 99
July	1,255 16	1,255 16
August	1,277 59	1,277 59
September	2,658 32	2,658 32
<hr/>		<hr/>
Total amount drawn and paid from the State Treasury	\$31,163 48	\$31,163 48

RECEIPTS AND DISBURSEMENTS ON ACCOUNT OF INDUSTRIES.

Auditor's warrants on the State Treasury—

1906.	Receipts.	Disbursements.
November	\$294 65	\$294 65
December	245 10	245 10
1907.		
January	309 08	309 08
February	238 31	238 31
March	278 25	278 25
April	280 19	280 19
May	324 75	324 75
June	132 77	132 77
August	262 80	262 80
September	382 45	382 45
<hr/>		
Total amount drawn and paid from the State Treasury	\$2,748 35	\$2,748 35

RECEIPTS AND DISBURSEMENTS ON ACCOUNT OF REPAIRS.

Auditor's warrants on the State Treasury—

1906.	Receipts.	Disbursements.
November	\$99 06	\$99 06
December	396 61	396 61
1907.		
January	402 78	402 78
February	28 44	28 44
March	106 04	106 04
April	13 78	13 78
May	53 61	53 61
June	66 00	66 00
July	55 78	55 78
August	435 63	435 63
September	629 43	629 43
<hr/>		
Total amount drawn and paid from the State Treasury	\$2,287 16	\$2,287 16

RECEIPTS AND DISBURSEMENTS ON ACCOUNT OF LIBRARY.

Auditor's warrants on the State Treasury—

1906.	Receipts.	Disbursements.
November	\$28 55	\$28 55
December	17 67	17 67

1907.	<i>Receipts. Disbursements.</i>	
January	\$49 01	\$49 01
February	89 74	89 74
March	24 47	24 47
April	29 08	29 08
May	9 18	9 18
June	60	60
July	151 14	151 14
August	32 13	32 13
September	25 11	25 11
<hr/>		
Total amount drawn and paid from the State Treasury	\$456 68	\$456 68

TABLE SHOWING THE MONTHLY RECEIPTS FROM THE WORK-
SHOPS OF THE INDIANA SCHOOL FOR THE BLIND FOR
THE FISCAL YEAR ENDING SEPTEMBER 30, 1907.

DATE.	Broom Shop.	Cane Shop.	Sewing Room.	Miscel- laneous.	Total.
November.....	\$16 25	\$3 10	\$3 00	.....	\$22 35
December.....	18 35	50	12 50	.....	31 35
January.....	26 45	75	2 65	.....	29 85
February.....	60 85	2 15	2 00	.....	65 00
March.....	25 05	4 85	1 15	.....	31 05
April.....	28 05	4 20	2 30	\$4 30	38 85
May.....	43 60	10 05	5 05	7 15	65 85
Total.....	\$218 60	\$25 60	\$28 65	\$11 45	\$284 30

EXPENDITURES FOR FISCAL YEAR ENDING SEPTEMBER 30, 1907.

List of Vouchers Allowed—Maintenance.

November, 1906—

1.	J. F. Hennessey	Payroll	\$1,601 67
2.	Geo. S. Wilson.....	Payroll	266 00
3.	Geo. S. Wilson.....	Incidentals	18 35
4.	Morgan & Jackson Co.....	Fuel	521 45
5.	J. C. Perry & Co.....	Groceries	253 42
6.	Pettis Dry Goods Co.....	Supplies	220 52
7.	Kingan & Co.....	Meat and lard.....	220 16
8.	W. M. Ball.....	Milk	107 40
9.	Jas. L. Keach.....	Fruits and vegetables....	73 89
10.	J. R. Budd & Co.....	Eggs and poultry.....	69 69
11.	Armour & Co.....	Butterine, laundry sup..	63 08
12.	John O'Neill	Breadstuff	59 80
13.	Central Rub. and Sup. Co.....	Supplies	36 10
14.	Indianapolis Coffee and Spice Co..	Coffee and spice.....	29 81
15.	Polar Ice and Fuel Co.....	Ice	25 00
16.	C. C. Campbell.....	Butter	19 75
17.	Indianapolis Gas Co.....	Gas	16 83
18.	Vawter Hay and Grain Co.....	Stable supplies	15 07
19.	National Refining Co.....	Engine supplies	12 70
20.	Indianapolis Water Co.....	Water	10 50
21.	Geo. H. Swain.....	Supplies	10 28
22.	American Dist. Tel. Co.....	Nightwatch	10 05
23.	Louis Diddix	Drayage	9 00
24.	Saks & Co.....	Supplies	9 00
25.	A. Booth & Co.....	Fish and oysters.....	8 95
26.	Crescent Paper Co.....	Supplies	8 93
27.	West Disinfecting Co.....	Disinfectants	7 50
28.	R. W. Furnas Co.....	Ice cream	6 95
29.	Remington Tp. Co.....	Rental and repairs.....	4 54
30.	Central Union Tel. Co.....	Phone rent	3 34
31.	Geo. R. Popp.....	Supplies	2 42
32.	Fleischmann Yeast Co.....	Yeast	1 63
33.	Dennis Egan	Horseshoeing	1 50
34.	Strawmyer & Nilius	Stable supplies	1 30
35.	Knight & Jillson Co.....	Supplies	1 00
36.	E. M. Crawford.....	Drugs	85
37.	Atlas Engine Works.....	Engine supplies	75

\$3,729 18

December, 1906—

38.	J. F. Hennessey.....	Payroll	\$1,539 67
39.	George S. Wilson.....	Payroll	266 00
40.	George S. Wilson.....	Incidentals	19 58
41.	Morgan Coal & Lime Co.....	Fuel	597 02
42.	Pettis Dry Goods Co.....	Supplies	273 70
43.	J. C. Perry & Co.....	Groceries	265 30
44.	Kingan & Co.....	Meat and lard.....	222 05
45.	W. M. Ball.....	Milk	109 45
46.	J. R. Budd Co.....	Eggs and poultry.....	83 55
47.	Jas. L. Keach.....	Fruit and vegetables....	59 18
48.	George T. Evans & Son.....	Breadstuff	43 70
49.	Frank E. Janes.....	Stable supplies	31 54
50.	Indianapolis Coffee and Spice Co..	Coffee	29 21
51.	M. C. Hunt.....	Laundry supplies	25 38
52.	Central Supply Co.....	Supplies	25 00
53.	Armour & Co.....	Butterine	23 52

LIST OF VOUCHERS ALLOWED—MAINTENANCE—Continued.

December, 1906—Continued.

54.	C. C. Campbell.....	Butter	\$20 00
55.	National Biscuit Co.....	Crackers	14 40
56.	Polar Ice & Fuel Co.....	Ice	12 50
57.	Otto J. Suesz	Repairs	12 50
58.	Indianapolis Water Co.....	Water	11 14
59.	Indianapolis Gas Co.....	Gas	10 80
60.	A. Booth & Co.....	Fish and oysters.....	10 68
61.	American Dist. Tel. Co.....	Nightwatch	10 05
62.	Indianapolis Telephone Co.....	Phone rent	10 00
63.	Crescent Paper Co.....	Supplies	8 00
64.	West Disinfecting Co.....	Disinfectants	7 50
65.	Saks & Co.....	Supplies	7 25
66.	Carlin & Lennox.....	Supplies	3 50
67.	Central Union Tel. Co.....	Phone rent	3 33
68.	Dennis Egan	Horseshoeing	3 00
69.	R. W. Furnas Co.....	Ice cream	2 80
70.	Fleischmann Yeast Co.....	Yeast	1 63
71.	E. M. Crawford.....	Drugs	1 40

\$3,764 33

January, 1907—

72.	J. F. Hennessy.....	Payroll	\$1,647 66
73.	George S. Wilson.....	Payroll	265 17
74.	George S. Wilson.....	Incidentals	9 07
75.	Morgan Coal & Lime Co.....	Coal	404 13
76.	Kingan & Co.....	Meat and lard.....	236 29
77.	M. O'Connor & Co.....	Groceries	184 81
78.	W. M. Ball.....	Milk	109 78
79.	L. M. Dunlap.....	Salary and expenses.....	92 40
80.	A. C. Pilkenton.....	Salary and expenses.....	79 20
81.	J. F. Hennessy.....	Salary and expenses.....	75 75
82.	Jas. L. Keach.....	Fruits and vegetables....	49 01
83.	Armour & Co.....	Butterine	47 04
84.	Geo. T. Evans & Son.....	Breadstuff	46 05
85.	Indianapolis Coffee and Spice Co...	Coffee	27 75
86.	M. C. Hunt.....	Laundry supplies	27 47
87.	A. Booth & Co.....	Fish, oysters, poultry...	25 63
88.	Polar Ice & Fuel Co.....	Ice	25 00
89.	C. C. Campbell.....	Butter	20 00
90.	Century Biscuit Co.....	Bread and crackers.....	19 58
91.	Pettis Dry Goods Co.....	Supplies	18 15
92.	J. R. Budd & Co.....	Eggs	14 40
93.	Indianapolis Water Co.....	Water	11 70
94.	Indianapolis Gas Co.....	Gas	11 16
95.	Geo. H. Swain.....	Supplies	10 50
96.	American Dist. Tel. Co.....	Nightwatch	10 05
97.	Robert Thomas	Drayage	9 00
98.	Crescent Paper Co.....	Supplies	8 00
99.	West Disinfecting Co.....	Disinfectants	7 20
100.	Frank E. Janes.....	Stable supplies	5 65
101.	Vonnegut Hardware Co.....	Supplies	5 39
102.	Central Union Tel. Co.....	Phone rent	3 33
103.	R. W. Furnas Co.....	Ice cream	2 55
104.	Bert Robinson	Hauling	2 00
105.	Fleischmann Yeast Co.....	Yeast	1 63
106.	Dennis Egan	Horseshoeing	1 50
107.	Sanborn-Marsh Electric Co.....	Supplies	1 25
108.	Strawmayer & Nillus	Supplies	75
109.	E. M. Crawford.....	Drugs	50

\$3,516 50

LIST OF VOUCHERS ALLOWED—MAINTENANCE—Continued.

February, 1907—

110.	J. F. Hennessey.....	Payroll	\$1,510 74
111.	George S. Wilson.....	Payroll	267 83
112.	George S. Wilson.....	Incidentals	10 38
113.	Morgan Coal & Lime Co.....	Coal	571 50
114.	Kingan & Co.....	Meat and lard.....	222 12
115.	M. O'Connor & Co.....	Groceries	174 46
116.	W. M. Ball.....	Milk	104 35
117.	Geo. T. Evans & Son.....	Breadstuff	47 83
118.	Indianapolis Coffee and Spice Co...	Coffee and tea.....	47 02
119.	Jas. L. Keach.....	Fruits and vegetables...	36 59
120.	Pettis Dry Goods Co.....	Supplies	26 40
121.	Polar Ice & Fuel Co.....	Ice	25 00
122.	M. C. Hunt.....	Laundry supplies	23 96
123.	Armour & Co.....	Butterine	23 52
124.	J. R. Budd & Co.....	Eggs and poultry.....	22 28
125.	C. C. Campbell.....	Butter	20 00
126.	Robert Thomas	Drayage	16 25
127.	National Biscuit Co.....	Crackers	12 15
128.	A. Booth & Co.....	Fish and oysters.....	11 16
129.	Indianapolis Water Co.....	Water	10 13
130.	American Dist. Tel. Co.....	Nightwatch	10 06
131.	Indianapolis Gas Co.....	Gas	7 65
132.	West Disinfecting Co.....	Disinfectants	7 20
133.	Vawter Hay & Grain Co.....	Supplies	4 90
134.	Central Union Tel. Co.....	Phone rent	3 33
135.	Geo. H. Swain.....	Supplies	2 95
136.	R. W. Furnas Ice Cream Co.....	Ice cream	2 80
137.	J. A. Spence.....	Repairs	2 50
138.	Jos. Gardner	Supplies	2 30
139.	Fleischmann Yeast Co.....	Yeast	1 50
140.	Indiana Gravel Co.....	Supplies	1 25
141.	E. M. Crawford.....	Drugs	1 20

 \$3,231 30

March, 1907—

142.	J. F. Hennessey.....	Payroll	\$1,565 43
143.	George S. Wilson.....	Payroll	259 39
144.	George S. Wilson.....	Incidentals	12 99
145.	Kingan & Co.....	Meat and lard.....	241 87
146.	Morgan Coal & Lime Co.....	Fuel	227 67
147.	M. O'Connor & Co.....	Groceries	214 70
148.	W. M. Ball.....	Milk	122 50
149.	Jas. L. Keach.....	Fruits and vegetables...	62 84
150.	J. R. Budd Co.....	Eggs and poultry.....	50 63
151.	George T. Evans & Son.....	Breadstuff	49 08
152.	Indianapolis Coffee and Spice Co...	Coffee and Spice.....	28 99
153.	Pettis Dry Goods Co.....	Supplies	26 13
154.	Polar Ice & Fuel Co.....	Ice	25 00
155.	C. C. Campbell.....	Butter	25 00
156.	M. C. Hunt.....	Laundry supplies	22 06
157.	Crescent Oil Co.....	Oil	18 20
158.	National Biscuit Co.....	Crackers	12 95
159.	Allen Taylor	Labor	12 25
160.	Indianapolis Water Co.....	Water	12 03
161.	George H. Swain.....	Supplies	10 25
162.	American Dist. Tel. Co.....	Nightwatch	10 06
163.	Indianapolis Tel. Co.....	Phone rent	10 00
164.	Independent Fish & Oyster Co...	Fish and oysters.....	9 36
165.	Crescent Paper Co.....	Paper	8 00
166.	West Disinfecting Co.....	Disinfectants	7 20

LIST OF VOUCHERS ALLOWED—MAINTENANCE—Continued.

March, 1907—Continued.

167.	Indianapolis Gas Co.....	Gas	\$7 11
168.	R. W. Furnas Ice Cream Co.....	Ice cream	3 75
169.	Vawter Hay & Grain Co.....	Stable supplies	3 40
170.	Central Union Telephone Co.....	Phone rent	3 34
171.	Dennis Egan	Horseshoeing	2 40
172.	E. M. Crawford.....	Supplies	2 40
173.	The Fleischmann Co.....	Yeast	1 63
174.	Armour & Co.....	Butterine	23 52
175.	William Thomas	Horse	180 00
			<hr/> \$3,272 12

April, 1907—

176.	J. F. Hennessey.....	Payroll	\$1,635 84
177.	George S. Wilson.....	Payroll	259 67
178.	George S. Wilson.....	Incidentals	6 65
179.	H. T. Conde Implement Co.....	Carriage and harness....	475 00
180.	Kingan & Co.....	Meat and lard.....	255 97
181.	M. O'Connor & Co.....	Groceries	210 22
182.	Morgan Coal & Lime Co.....	Coal	146 39
183.	W. M. Ball	Milk	116 40
184.	L. M. Dunlap.....	Salary and expenses....	92 40
185.	A. C. Pilkenton.....	Salary and expenses....	79 20
186.	J. F. Hennessey.....	Salary and expenses....	75 75
187.	Jas. L. Keach.....	Fruits and vegetables....	52 99
188.	Pettis Dry Goods Co.....	Supplies	47 64
189.	Glazier Nozzle Mfg. Co.....	Fire extinguishers	28 85
190.	The Olds Soap Co.....	Laundry supplies	30 84
191.	Indianapolis Coffee and Spice Co...	Coffee and spice.....	30 45
192.	Polar Ice and Fuel Co.....	Ice	25 00
193.	Armour & Co.....	Butterine	23 04
194.	C. C. Campbell.....	Butter	20 13
195.	Geo. T. Evans & Son.....	Breadstuff	18 08
196.	Independent Fish and Oyster Co...	Eggs and poultry.....	17 63
197.	Chas. Mayer & Co.....	Gymnasium supplies	17 30
198.	National Refining Co.....	Supplies	14 75
199.	Indianapolis Water Co.....	Water	12 75
200.	American Dist. Tel. Co.....	Nightwatch	10 05
201.	Lewis Biddix	Drayage	9 00
202.	Crescent Paper Co.....	Supplies	8 00
203.	West Disinfecting Co.....	Disinfectants	7 20
204.	Indianapolis Gas Co.....	Gas	6 21
205.	R. W. Furnas Ice Cream Co.....	Ice cream	5 60
206.	W. B. Craig.....	Services	5 00
207.	Cent. Union Tel. Co.....	Phone rent	3 34
208.	A. Booth & Co.....	Fish	3 30
209.	E. M. Crawford.....	Drugs	2 25
210.	J. R. Budd Co.....	Poultry	2 03
211.	The Fleischmann Co.....	Yeast	1 63
212.	Dennis Egan	Horseshoeing	1 50
			<hr/> \$3,758 05

May, 1907—

213.	J. F. Hennessey.....	Payroll	\$1,799 49
214.	George S. Wilson.....	Payroll	309 97
215.	George S. Wilson.....	Incidentals	23 89
216.	Kingan & Co.....	Meat and lard.....	268 17
217.	Wm. B. Burford.....	Stationery and printing..	199 34
218.	Morgan Coal and Lime Co.....	Fuel	184 60
219.	M. O'Connor & Co.....	Groceries	151 22
220.	W. M. Ball	Milk	114 45
221.	Jas. L. Keach.....	Fruits and vegetables....	80 32

LIST OF VOUCHERS ALLOWED—MAINTENANCE—Continued.

May, 1907—Continued.

222.	J. R. Budd Co.....	Eggs and poultry	\$38 27
223.	M. C. Hunt.....	Laundry supplies	34 89
224.	Indianapolis Coffee and Spice Co.....	Coffee	27 75
225.	Frank E. Janes.....	Supplies	25 30
226.	C. C. Campbell.....	Butter	25 00
227.	Armour & Co.....	Butterine	23 04
228.	Pettis Dry Goods Co.....	Supplies	20 26
229.	Indianapolis Gas Co.....	Gas	19 71
230.	Indianapolis Water Co.....	Water	15 26
231.	Century Biscuit Co.....	Crackers	9 85
232.	Vonnegut Hardware Co.....	Supplies	9 32
233.	R. W. Furnas Ice Cream Co.....	Ice cream	8 15
234.	Crescent Paper Co.....	Supplies	8 00
235.	West Disinfecting Co.....	Disinfectants	7 20
236.	Sanborn-Marsh Electric Co.....	Supplies	4 59
237.	E. M. Crawford.....	Drugs	4 50
238.	Central Union Tel. Co.....	Phone rent	3 33
239.	Geo. H. Swain.....	Supplies	2 70
240.	Dennis Egan	Horseshoeing	1 90
241.	The Fleischmann Co.....	Yeast	1 75
242.	Joseph Gardner	Repairs	1 00
243.	Independent Fish and Oyster Co.....	Fish	37
244.	Strawmyer & Nilius.....	Repairing	30
245.	American Dist. Tel. Co.....	Nightwatch	10 05
			<hr/> \$3,423 94

June, 1907—

246.	J. F. Hennessey.....	Payroll	\$527 81
247.	George S. Willson.....	Payroll	53 50
248.	George S. Wilson.....	Incidentals	23 56
249.	J. C. Perry & Co.....	Groceries	128 08
250.	Kingan & Co.....	Meat and lard.....	108 75
251.	Morgan Coal & Lime Co.....	Coal and cement.....	100 97
252.	H. T. Conde Imp. Co.....	Repairing carriage	65 00
253.	M. C. Hunt.....	Laundry supplies	35 00
254.	Indianapolis Coffee and Spice Co.....	Coffee	27 75
255.	Jas. L. Keach.....	Fruits and vegetables ..	26 12
256.	J. R. Budd Co.....	Eggs and poultry.....	19 19
257.	W. M. Ball.....	Milk	19 18
258.	Polar Ice & Fuel Co.....	Ice	17 50
259.	Indianapolis Water Co.....	Water	16 50
260.	Indianapolis Gas Co.....	Gas	12 78
261.	Vawter Hay & Grain Co.....	Supplies	11 80
262.	American Dist. Tel. Co.....	Nightwatch	10 05
263.	Indianapolis Tel. Co.....	Phone rent	10 00
264.	J. K. Henby & Son.....	Supplies	7 65
265.	Pettis Dry Goods Co.....	Supplies	6 66
266.	C. C. Campbell.....	Butter	6 25
267.	Frank Bird Transfer Co.....	Drayage	6 00
268.	George Thompson.....	Salary	5 00
269.	Indianapolis Creamery	Ice cream	4 95
270.	Fortune's Grocery	Supplies	3 95
271.	Cent. Union Tel. Co.....	Phone rent	3 34
272.	West Disinfecting Co.....	Disinfectants	2 20
273.	Standard Oil Co.....	Supplies	1 88
274.	Dennis Egan	Horseshoeing	75
275.	E. M. Crawford.....	Drugs	60
276.	Strawmyer & Nilius.....	Supplies	50
277.	Fleischmann Co.....	Yeast	13
278.	American Dairy Co.....	Butter	3 60
			<hr/> \$1,266 99

LIST OF VOUCHERS ALLOWED—MAINTENANCE—Continued.

July, 1907—

279.	J. F. Hennessey.....	Payroll	\$496 66
280.	George S. Wilson.....	Payroll	63 66
281.	George S. Wilson.....	Incidentals	55 77
282.	L. M. Dunlap.....	Salary and expenses.....	86 68
283.	F. F. Wiley.....	Salary and expenses.....	82 66
284.	A. C. Pilkenton.....	Salary and expenses.....	77 80
285.	J. F. Hennessey.....	Salary and expenses.....	75 75
286.	Morgan Coal & Lime Co.....	Coal	111 01
287.	Kingan & Co.....	Meat and lard.....	62 42
288.	W. M. Ball.....	Milk	13 80
289.	Jas. L. Keach.....	Fruits and vegetables....	26 47
290.	J. R. Budd Co.....	Eggs and poultry.....	11 56
291.	Vawter Hay & Grain Co.....	Supplies	11 20
292.	American Dist. Tel. Co.....	Nightwatch	10 05
293.	C. C. Campbell.....	Butter	10 00
294.	Indianapolis Gas Co.....	Gas	9 99
295.	Fortune's Grocery	Supplies	9 60
296.	Lewis Biddix	Drayage	8 00
297.	Polar Ice and Fuel Co.....	Ice	7 50
298.	E. M. Crawford.....	Drugs	6 00
299.	Indianapolis Water Co.....	Water	5 10
300.	Central Union Telephone Co.....	Phone rent	3 33
301.	Strawmyer & Nilius.....	Stable supplies	2 80
302.	Geo. H. Swain.....	Supplies	2 00
303.	Indianapolis Creamery	Ice cream	2 40
304.	Dennis Egan	Horseshoeing	1 50
305.	West Disinfecting Co.....	Disinfectants	1 20
306.	Welsbach Light Co.....	Supplies	25
			<hr/> \$1,255 16

August, 1907—

307.	J. F. Hennessey.....	Payroll	\$511 35
308.	George S. Wilson.....	Payroll	150 78
309.	George S. Wilson.....	Incidentals	33 13
310.	R. Harry Miller.....	Wood	195 00
311.	Kingan & Co.....	Meat and lard.....	92 20
312.	M. O'Connor & Co.....	Groceries	43 20
313.	Allen Taylor	Salary	38 89
314.	James L. Keach.....	Fruits and vegetables....	32 05
315.	J. R. Budd Co.....	Eggs and poultry.....	27 42
316.	C. W. Mason.....	Salary	25 00
317.	C. C. Campbell.....	Butter	18 00
318.	W. M. Ball.....	Milk	15 98
319.	Polar Ice and Fuel Co.....	Ice	15 00
320.	Indianapolis Coffee and Spice Co...	Coffee	14 07
321.	Fortune's Grocery	Supplies	12 78
322.	American Dist. Tel. Co.....	Nightwatch	10 05
323.	Indianapolis Gas Co.....	Gas	8 73
324.	Vonnegut Hardware Co.....	Supplies	7 36
325.	Morgan Coal & Lime Co.....	Coal	5 24
326.	Pettis Dry Goods Co.....	Supplies	4 66
327.	Indianapolis Creamery	Ice cream	3 45
328.	Central Union Tel. Co.....	Phone rent	3 33
329.	Dennis Egan	Horseshoeing	3 00
330.	Strawmyer & Nilius.....	Supplies	2 00
331.	E. M. Crawford.....	Drugs	1 95
332.	Indianapolis Water Co.....	Water	1 35
333.	West Disinfecting Co.....	Disinfectants	1 24
334.	The Fleischmann Co.....	Yeast	38
			<hr/> \$1,277 59

LIST OF VOUCHERS ALLOWED—MAINTENANCE—Continued.

September, 1907—

335.	J. F. Hennessey.....	Payroll	\$761 54
336.	George S. Wilson.....	Payroll	264 93
337.	George S. Wilson.....	Incidentals	27 42
338.	L. M. Dunlap.....	Salary and expenses.....	61 52
339.	F. F. Wiley.....	Salary and expenses.....	52 48
340.	A. C. Pilkenton.....	Salary and expenses.....	52 10
341.	J. F. Hennessey.....	Salary and expenses.....	50 50
342.	Pettis Dry Goods Co.....	Supplies	721 83
343.	Kingan & Co.....	Meat and lard.....	122 70
344.	J. C. Perry & Co.....	Groceries	105 36
345.	James L. Keach.....	Fruits and vegetables.....	54 65
346.	Morgan Coal & Lime Co.....	Coal and other supplies..	41 52
347.	W. M. Ball.....	Milk	36 90
348.	J. R. Budd Co.....	Eggs and poultry.....	34 75
349.	Chas. Krauss & Sons.....	Repairs	29 75
350.	M. C. Hunt.....	Laundry supplies	24 90
351.	Vonnegut Hardware Co.....	Supplies	43 85
352.	C. C. Campbell.....	Butter	20 00
353.	Indianapolis Gas Co.....	Gas	14 31
354.	Standard Oil Co.....	Oil	13 07
355.	Knight & Jillson Co.....	Supplies	13 03
356.	Indianapolis Water Co.....	Water	10 13
357.	American Dist. Tel. Co.....	Nightwatch	10 05
358.	Indianapolis Tel. Co.....	Phone rent	10 00
359.	Frank E. Janes.....	Supplies	9 85
360.	Indianapolis Coffee and Spice Co..	Coffee	9 38
361.	Joe Mosley	Salary	8 75
362.	Crescent Paper Co.....	Paper	8 00
363.	Indianapolis Creamery	Ice cream	5 10
364.	"The Wall," the Lace Curtain Laundry	Laundry of curtains.....	4 00
365.	Central Union Tel. Co.....	Phone rent	3 33
366.	Geo. H. Swain.....	Supplies	3 30
367.	Vawter Hay & Grain Co.....	Supplies	2 94
368.	West Disinfecting Co.....	Disinfectants	2 58
369.	E. M. Crawford.....	Drugs	2 35
370.	Fleischmann Co.....	Yeast	1 00
371.	Lilly & Stalnaker.....	Supplies	75
372.	Fortune's Grocery	Supplies	30
373.	Strawmyer & Nilius.....	Repairs	15
374.	Samuel Vaughan	Salary	7 50
375.	Leo. J. Rickenbach.....	Supplies	6 75
376.	John Wickliffe	Salary	5 00

\$2,658 32

LIST OF VOUCHERS ALLOWED—INDUSTRIAL.

November, 1906—

1.	C. B. Keeler.....	Salary	\$92 40
2.	C. B. French.....	Salary	66 00
3.	B. F. Smith.....	Salary	55 00
4.	William Rhoades	Salary	46 20
5.	J. G. Hermann & Co.....	Industrial supplies	20 00
6.	Pettis Dry Goods Co.....	Industrial supplies	15 05

\$294 65

December, 1906—

7.	C. B. Keeler.....	Salary	\$84 00
8.	C. B. French.....	Salary	60 00
9.	B. F. Smith.....	Salary	50 00
10.	William Rhoades	Salary	44 10
11.	Francke Hardware Co.....	Supplies	7 00

\$245 10

LIST OF VOUCHERS ALLOWED—INDUSTRIAL—Continued.

January, 1907—

12. C. B. Keeler.....	Salary	\$96 60
13. C. B. French.....	Salary	69 00
14. B. F. Smith.....	Salary	55 00
15. William Rhoades	Salary	48 30
16. Pettis Dry Goods Co.....	Supplies	28 98
17. C. H. Lang & Co.....	Supplies	6 94
18. J. G. Hermann & Co.....	Supplies	4 26

\$309 08

February, 1907—

19. C. B. Keeler.....	Salary	\$84 00
20. C. B. French.....	Salary	60 00
21. B. F. Smith.....	Salary	50 00
22. William Rhoades	Salary	42 00
23. John A. Schaff.....	Supplies	2 31

\$238 31

March, 1907—

24. C. B. Keeler.....	Salary	\$88 20
25. C. B. French.....	Salary	63 00
26. B. F. Smith.....	Salary	55 00
27. William Rhoades	Salary	44 10
28. Vonnegut Hardware Co.....	Supplies	12 65
29. Indianapolis Mfg. & Carp. Union.....	Supplies	7 80
30. Strawmyer & Nilius.....	Supplies	3 90
31. J. G. Hermann & Co.....	Supplies	3 60

\$278 25

April, 1907—

32. C. B. Keeler.....	Salary	\$92 40
33. C. B. French.....	Salary	66 00
34. B. F. Smith.....	Salary	50 00
35. William Rhoades	Salary	46 20
36. Indianapolis Mfg. & Carp. Union.....	Supplies	19 34
37. Singer Sewing Machine Co.....	Repairs	5 00
38. The Ford & Johnson Co.....	Wood spline	1 25

\$280 19

May, 1907—

39. C. B. Keeler.....	Salary	\$109 20
40. C. B. French.....	Salary	78 00
41. B. F. Smith.....	Salary	71 00
42. William Rhoades	Salary	48 30
43. U. S. Rattan Co.....	Supplies	18 25

\$324 75

June, 1907—

44. Vonnegut Hardware Co.....	Supplies	\$71 57
45. William Rhoades	Salary	42 00
46. Balke & Krauss Co.....	Supplies	19 20

\$132 77

August, 1907—

47. Singer Sewing Machine Co.....	Sewing machines	\$184 80
48. A. D. May.....	Sewing machines	78 00

\$262 80

September, 1907—

49. Singer Sewing Machine Co.....	Motors	\$74 00
50. J. H. Ballman & Sons.....	Painting	69 00
51. O. G. Crank.....	Salary	61 60
52. Allen Taylor	Salary	50 00
53. William Rhoades	Salary	44 10
54. Vonnegut Hardware Co.....	Supplies	36 20
55. C. B. Keeler	Salary	16 80
56. C. B. French.....	Salary	12 00
57. B. F. Smith.....	Salary	10 00
58. C. W. Mason.....	Salary	8 75

\$382 45

LIST OF VOUCHERS ALLOWED—REPAIRS.

November, 1906—

1.	Vonnegut Hardware Co.....	Supplies	\$36 55
2.	Indianapolis Mfg. & Carp. Union....	Supplies	32 70
3.	Joseph Gardner	Repairs	15 46
4.	Aldag Paint & Varnish Co.....	Supplies	9 39
5.	Sanborn-Marsh Electric Co.....	Supplies	3 71
6.	Louis Rexroth	Repairs	1 25

 \$99 06

December, 1906—

7.	J. H. Ballman & Sons.....	Painting	\$316 00
8.	Indianapolis Mfg. & Carp. Union....	Supplies	21 00
9.	Louis Rexroth	Repairs	21 25
10.	Knight & Jillson Co.....	Supplies	14 49
11.	Vonnegut Hardware Co.....	Supplies	10 07
12.	Denges & Rollings.....	Repairs	5 30
13.	Sanborn-Marsh Electric Co.....	Supplies	2 85
14.	Jenny Electric Mfg. Co.....	Supplies	2 80
15.	Aldag Paint & Varnish Co.....	Supplies	2 25

 \$396 61

January, 1907—

16.	J. H. Ballman & Sons.....	Painting	\$152 80
17.	Pettis Dry Goods Co.....	Repairs	110 67
18.	P. W. Kennedy	Repairs	107 00
19.	Aldag Paint & Varnish Co.....	Supplies	16 90
20.	Knight & Jillson Co.....	Supplies	15 41

 \$402 78

February, 1907—

21.	Vonnegut Hardware Co.....	Supplies	\$22 25
22.	Aldag Paint & Varnish Co.....	Supplies	2 30
23.	Indianapolis Mfg. & Carp. Union....	Supplies	2 14
24.	Atlas Engine Works.....	Supplies	1 75

 \$28 44

March, 1907—

25.	Taylor Belting Co.....	Supplies	\$30 32
26.	Denges & Rollings.....	Repairs	7 80
27.	Knight & Jillson Co.....	Supplies	6 02
28.	G. W. Reed.....	Labor	1 20
29.	Aldag Paint & Varnish Co.....	Supplies	45
30.	Sanborn-Marsh Electric Co.....	Supplies	25

 \$106 04

April, 1907—

31.	Aldag Paint & Varnish Co.....	Supplies	\$4 75
32.	Vonnegut Hardware Co.....	Supplies	2 95
33.	Knight & Jillson Co.....	Supplies	2 28
34.	Geo. H. Swain.....	Supplies	2 00
35.	Dean Bros. Steam Pump Works....	Supplies	1 80

 \$13 78

May, 1907—

36.	Aldag Paint & Varnish Co.....	Supplies	\$20 13
37.	Knight & Jillson Co.....	Supplies	18 39
38.	Denges & Rollings.....	Repairs	13 70
39.	Indianapolis Mfg. & Carp. Union....	Supplies	1 39

 \$53 61

LIST OF VOUCHERS ALLOWED—REPAIRS—Continued.

June, 1907—

40. Mon Powers	Salary	\$50 00	
41. Welsbach Light Co.....	Supplies	9 25	
42. Knight & Jillson Co.....	Supplies	4 18	
43. Aldag Paint & Varnish Co.....	Supplies	2 57	
			\$66 00

July, 1907—

44. Mon Powers	Salary	\$50 00	
45. Knight & Jillson Co.....	Supplies	3 06	
46. Vonnegut Hardware Co.....	Supplies	2 72	
			\$55 78

August, 1907—

47. J. H. Ballman & Sons.....	Painting	\$380 00	
48. Mon Powers	Salary	50 00	
49. Knight & Jillson Co.....	Supplies	5 63	
			\$435 63

September, 1907—

50. J. H. Ballman & Sons.....	Painting	\$339 00	
51. Denges & Rollings.....	Plumbing	110 40	
52. Geo. Wallace	Salary	50 00	
53. Indianapolis Mfg. & Carp. Union...	Supplies	42 93	
54. Adolf Scherrer	Services as architect....	10 00	
55. Aldag Paint & Varnish Co.....	Supplies	7 60	
56. J. A. Spence.....	Supplies	1 50	
57. Pettis Dry Goods Co.....	Papering	68 00	
			\$629 43

LIST OF VOUCHERS ALLOWED—LIBRARY.

November, 1906—

1. Bobbs-Merrill Co.....	Books	\$14 55	
2. William B. Burford.....	Supplies	8 40	
3. Wulschner-Stewart Music Co.....	Supplies	2 50	
4. Carlin & Lennox.....	Supplies	1 95	
5. Scofield-Pierson Co.....	Book	1 15	
			\$28 55

December, 1906—

6. Bobbs-Merrill Co.....	Books	\$8 31	
7. Ill. School for Blind.....	Supplies	6 36	
8. Wulschner-Stewart Music Co.....	Supplies	50	
9. Indianapolis News	Subscription	2 50	
			\$17 67

January, 1907—

10. Carlin & Lennox.....	Supplies	\$24 42	
11. Perkins Inst. for Blind.....	Supplies	19 44	
12. Indianapolis Star	Subscription	3 60	
13. Edward Pawling	Subscription	1 30	
14. Bobbs-Merrill Co.....	Supplies	25	
			\$49 01

February, 1907—

15. Society for Providing Evangelical Religious Literature for the Blind..	Subscriptions	\$30 00	
16. Bobbs-Merrill Co.....	Magazines	24 20	
17. Crescent Paper Co.....	Supplies	14 00	
18. Carlin & Lennox.....	Supplies	10 64	
19. William B. Burford.....	Supplies	8 90	
20. Carl Fisher	Supplies	2 00	
			\$89 74

LIST OF VOUCHERS ALLOWED—LIBRARY—Continued.

March, 1907—

21. Peter Henderson Co.....	Books	\$13 30	
22. Carlin & Lennox	Supplies	5 17	
23. R. L. Polk & Co.....	City directory	6 00	
			<hr/>
			\$24 47

April, 1907—

24. C. P. Lesh Paper Co.....	Supplies	\$11 62	
25. Joseph Gardner	Zinc	6 25	
26. Carlin & Lennox	Supplies	5 91	
27. Bobbs-Merrill Co.....	Books	2 80	
28. Joseph Gockel	Subscription	2 50	
			<hr/>
			\$29 08

May, 1907—

29. Star Publishing Co.....	Subscription and ads....	\$4 10	
30. Carlin & Lennox	Supplies	3 63	
31. Indianapolis News	Publishing notice	80	
32. Bobbs-Merrill Co.....	Supplies	65	
			<hr/>
			\$9 18

June, 1907—

33. Carlin & Lennox	Supplies	\$0 60	
			<hr/>
			\$0 60

July, 1907—

34. William B. Burford.....	Supplies	\$124 63	
35. Bobbs-Merrill Co.....	Books	21 73	
36. Indianapolis Star	Advertising	2 00	
37. J. M. Hall.....	Magazine	1 50	
38. The Indianapolis News.....	Advertising	1 28	
			<hr/>
			\$151 14

August, 1907—

39. William B. Burford.....	Stationery	\$23 34	
40. Bobbs-Merrill Co.....	Book	5 00	
41. Star Publishing Co.....	Advertising	2 25	
42. Indianapolis News	Advertising	1 54	
			<hr/>
			\$32 13

September, 1907—

43. Bobbs-Merrill Co.....	Books	\$18 73	
44. Indianapolis News.....	Subscription and ads....	3 78	
45. Indianapolis Star	Subscription and ads....	2 60	
			<hr/>
			\$25 11

SUMMARY OF EXPENSES.

Trustees' salaries	\$950 00
Officers' salaries	3,783 98
Salaries of literary and music teachers	5,690 20
Skilled labor	4,128 68
Employes' salaries	2,512 04
Fresh meat	1,466 93
Salt meat and lard	586 67
Canned goods	440 17
Vinegar and syrup	49 08
Tea, coffee, sugar and spices	624 28
Milk	870 19
School supplies	4 93
Stationery and printing	199 34
Laundry supplies	253 20
Soaps and other cleaners	266 22
Medicines, instruments and other sick ward supplies	24 00
Postage, telegraph and long distance telephone	52 01
Freight and transportation	166 61
Ice	177 50
Fuel (coal and wood)	3,091 62
Gas (light and fuel)	125 28
Engineer's supplies	201 67
Labor	69 50
Repairs, common	115 24
Greenhouse supplies	51 33
Gymnasium supplies	37 75
Nightwatch (box rental)	110 55
Water	116 59
Phone rent	76 67
Pickles, sauer kraut, catsup, mustard, etc.....	102 65
Apple butter, jelly, etc.....	96 93
Dried fruit	121 60
Cheese	65 82
Furniture, fixtures, and other household equipment.....	1,361 84
Unclassified expenses	280 18
Vegetables	355 80
Butter, eggs and poultry	814 10
Breadstuff, cereals, beans, etc.....	630 19
Fresh fruit	200 34
Stable supplies	626 35
Unclassified food supplies	197 36
Fish (fresh and cured), oysters, etc.....	68 09
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Total—Maintenance	\$31,163 48

Supplies for industrial department	\$689 10
Salaries of industrial teachers and labor.....	2,059 25
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Total—Industrial	\$2,748 35
Repair of buildings (labor and supplies)	\$2,287 16
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Total—Repairs	\$2,287 16
Library supplies (books, periodicals, etc.).....	\$456 68
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Total—Library	\$456 68
Total expenditure for maintenance	\$31,163 48
Total expenditure for industrial department	2,748 35
Total expenditure for repairs	2,287 16
Total expenditure for library	456 68
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Total expenditure—all funds.....	\$36,655 67

APPROPRIATIONS AND RECEIPTS.

Appropriation for maintenance for 1907.....	\$34,000 00
*One-twelfth deduction	2,833 33
<hr/>	
Net maintenance	\$31,166 67
Appropriation for industry for 1907.....	\$3,000 00
*One-twelfth deduction	250 00
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Net industry	2,750 00
Appropriation for repairs for 1907.....	\$2,500 00
*One-twelfth deduction	208 33
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Net repair	2,291 67
Appropriation for library for 1907.....	\$500 00
*One-twelfth deduction	41 67
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Net library	458 33
Receipts from the work shops for 1907.....	284 30
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Total net receipts	\$36,950 97
Total expenditure, all funds	36,655 67
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Balance converted to the State Treasury.....	\$295 30

*In compliance with Section 2, Chapter 143, of the Acts of the Sixty-fifth General Assembly of Indiana.

TABULATED DATA.

YEAR.	En-rolled.	Dis-charged.	In at End of Year.	Absent at End of Year.	Average Attendance.	Total Expenses.	Balance.	Per Capita.
1847	25					\$6,203 93	\$296 80	\$248 12
1848	28					7,200 27	430 33	257 15
1849	38					7,499 65	1,267 92	197 35
1850	52					6,867 30	19 11	132 06
1851	52					7,503 73	190 49	144 30
1852	51					13,631 79	80 67	267 29
1853	46					10,695 31	1,844 60	232 50
1854	77					13,978 34	3,178 01	181 53
1855	87					19,794 31	15,568 80	227 52
1856	77					24,663 59	8,858 52	316 41
1857	63					17,598 89	14,675 96	279 33
1858	53					12,244 01	24,543 48	231 01
1859	66					18,251 28	519 60	276 15
1860	63					16,287 08	543 91	258 54
1861	77					18,013 17	7,049 99	233 94
1862	95					19,162 13	3,806 07	201 70
1863	93					19,557 80	2 44	210 29
1864	103					20,773 65	19,593 40	201 10
1865	111					29,751 01	3,276 64	268 02
1866	120					33,340 08	8,223 15	277 83
1867	123					33,822 36	2,053 54	274 98
1868	126					33,076 65	13,220 03	262 51
1869	102					47,646 40	663 78	267 10
1870	107					36,244 97	113 15	338 73
1871	114					24,640 22	666 48	303 86
1872	111					37,087 06	1,883 54	307 09
1873	105					30,793 66	2,381 23	378 98
1874	113					38,255 35	46 70	338 36
1875	116					34,183 79	78 49	294 68
1876	106					31,331 57	1,246 93	295 58
1877	110					32,208 44	1,853 82	292 80
1878	117					31,404 96	1,395 52	268 41
1879	123					26,307 48	6,781 40	213 88
1880	127					28,780 32	1,520 20	226 61
1881	126					31,362 34	810 92	248 90
1882	128					28,696 06	514 74	214 10
1883	120					28,682 70	1,129 56	239 02
1884	120					24,919 22	5,518 69	207 66
1885	126					26,617 44	3,883 22	211 25
1886	130					25,888 67	3,574 60	199 14
1887	132					28,142 90	1,260 87	213 20
1888	128					24,014 61	5,417 20	187 61
1889	132					27,502 56	2,497 54	208 35
1890	124					29,225 19	1,196 12	235 68
1891	144				122	28,833 71	1,683 50	200 23
1892	173				121.6	30,244 15	4,008 69	217 51
1893	150				129	33,889 66	1,224 96	225 93
1894	152	11			134.7	33,133 38	878 70	217 98
1895	126	3	105	18	111.8	33,738 15	424 64	267 76
1896	139	12	126	1	114.2	32,083 07	135 25	230 81
1897	157	7	137	13	122.7	30,124 08	1,963 70	191 42
1898	162	10	127	25	122.1	31,234 31	32 97	192 80
1899	150	3	130	17	123.6	30,840 79	289 09	205 60
1900	164	9	134	21	133.1	32,229 16	695 86	196 51
1901	158	3	138	17	130.8	32,242 13	508 64	204 06
1902	159	11	127	21	126.6	34,992 32	453 22	220 07
1903	152	2	126	24	125.1	36,989 65	427 81	243 35
1904	162	9	137	16	117.81	37,495 81	362 46	231 33
1905	162	7	135	20	128.37	37,495 75	344 98	231 45
1906	162	14	128	20	129.01	39,985 29	299 87	246 82
1907*	159	20	131	8	128.37	36,655.67	295 30	230 54

* Fiscal year ending September 30, 1907, consists of 11 months.

ESTIMATED VALUE OF ALL REAL ESTATE AND PERSONAL PROPERTY
BELONGING TO THE INDIANA SCHOOL FOR THE
BLIND, MADE SEPTEMBER 30, 1907.

REAL ESTATE.

One thousand six hundred eighty feet on Meridian and Pennsylvania streets, including that occupied as city park.....	\$378,000 00
Main building	110,000 00
Workshop building	2,000 00
Engine house and laundry	4,000 00
Stable	1,500 00
Bakery building	1,000 00
Greenhouse and fixtures	2,000 00
Three lots in Crown Hill	600 00
Girls' dormitory	45,000 00
Total	<u>\$544,100 00</u>

PERSONAL.

Boiler, tools and machinery in engine house.....	\$6,024 15
Machinery, material, etc., in laundry	591 30
Material, apparatus, etc., in bakery.....	45 00
Material, tools, etc., in broom shop	375 00
Material, tools, etc., in sloyd department.....	100 00
Material, machines, etc., in tuning department.....	107 32
Material, machines, etc., in girls' sewing room.....	498 80
Equipment in gymnasium	250 00
Plants and tools in greenhouse	500 00
Carriages, wagon and horse	700 00
Furniture and household goods	8,215 16
School apparatus	668 25
Embossed books and maps	3,629 81
Printed books	2,114 07
Pianos, horns, organs, music, etc.....	5,395 01
Provisions in household storeroom	250 85
Material in industrial storeroom	272 00
Safe, books and office equipment	240 00
Typewriters	288 00
Total	<u>\$30,264 72</u>
Total value of all real estate.....	\$544,100 00
Total value of all personal property	<u>30,264 72</u>
Total value of all real estate and all personal property.....	<u>\$574,364 72</u>

INFORMATION.

1. The purpose of this Institution is purely educational. The aim is to give a practical education to the young blind of both sexes residing in the State. All the common school branches are taught. An extensive course in music is available to all who have talent in this direction. A thorough course is given in several industrial trades, such as broom making, cane seating chairs and piano tuning. The girls learn sewing by hand and machine, knitting, crocheting, bead and fancy work. The purpose is to make the pupils useful, contented, self-supporting citizens. A gymnasium is equipped and a special teacher drills the pupils in systematic physical exercises. Pupils, when not in recitation, are in charge of a governess. Neatly furnished hospitals are provided for the sick.

2. The school year commences on the fourth Wednesday of September and closes the first Wednesday after the first Monday of June. There is no vacation during the session.

3. Applicants who are under eight or over twenty-one years of age are not admitted.

4. No person of imbecile or unsound mind, or of confirmed immoral character will be knowingly received into the Institution, and in case any pupils shall, after a fair trial, prove incompetent for useful instruction or disobedient to the regulations of the Institution, such pupils will be thereupon discharged.

5. The Institution is maintained by the State, and tuition, board and washing are furnished free of cost to all pupils residing in Indiana. The parents or friends of pupils must supply them with comfortable clothing, suitable for summer and winter wear, in such quantity as will admit of necessary changes. Each article of clothing should be distinctly marked with the owner's name, and must be sent in good condition. The traveling expenses of pupils must be defrayed by parents or friends.

6. It is positively required that every pupil shall be removed from the Institution during the annual vacation of the school, as well as at any other time when such removal may be deemed necessary by the proper officers thereof; and in case of failure of friends of any pupil to comply with this requisition, provision is made by the law for sending such pupil to the trustee of the township in which he resides, to be by him provided for at the expense of the county.

7. Parties desiring the admission of a pupil are required to fill up the required form of application and forward the same to the Superintendent of the Institution, giving truthful answers to the interrogatories therein contained, and procuring the signature of a justice of the peace to the certificate thereunto attached; and the pupil must in no case be sent until such application shall have been received and favorably responded to by the Superintendent.

8. The Superintendent will cheerfully give information in regard to

the Institution, and will thankfully receive any information concerning those who should be receiving its benefits.

9. Persons bringing pupils to the Institution or visiting them can not be accommodated with board and lodging.

10. That the work of the Institution may be done to the highest good of all it is necessary that every pupil shall be present at the opening of the term. Faithful work and prompt and regular attendance are essential to advancement and promotion. No pupil who is tardy at the beginning of the term, is irregular in attendance, or drops out before the close of the term, can hope to do acceptable work and receive promotion. Unless there is an excellent reason for doing otherwise, every pupil should be present on the first day and remain throughout the term.

11. Each pupil before entering the Institution should be supplied with the following clothing of good quality:

Boys—Two hats, two suits of clothes, two extra pairs of pants, four pairs of socks or six pairs of stockings, four shirts, two suits of underwear, two pairs of shoes, six handkerchiefs, two pairs of suspenders, a toothbrush, a clothesbrush, and a comb and hairbrush. Small boys need no suspenders, but should be supplied with an extra suit of underwear.

Girls—Two woolen and two cotton dresses, four aprons, three night dresses, two suits of summer and three of winter underwear, two dark and two light skirts, six pairs of stockings, six handkerchiefs, a wrap, a hat, rubbers, two pairs of shoes, a toothbrush, a clothesbrush, a comb and hairbrush.

This amount of clothing will be necessary within the year, that the children may be kept clean and comfortable. When parents are not able to furnish the required clothing they should not hesitate to call upon the Township Trustee, who will cheerfully provide for the needs of those who are worthy. All clothing should be marked with indelible ink.

12. It will be necessary for parents, guardians, etc., to provide for all incidental expenses of pupils. It will likewise be necessary for all persons sending children to the Institution to furnish them transportation to their homes at the close of the term.

STATISTICAL FORM FOR STATE INSTITUTIONS.

Prepared in accordance with a resolution of the National Conference of Charities and Correction, adopted May 15, 1906.

INDIANA SCHOOL FOR THE BLIND.

POPULATION.

1906-07.

	Male.	Female.	Total.
Number of inmates present at beginning of the fiscal year	57	71	128
Number received during the year.....	10	15	25
Number discharged or died during the year	12	16	28
Number at end of fiscal year	55	70	125
Daily average attendance (i. e., number of inmates actually present) during the year.....	59.93	68.44	128.37
Average number of officers and employes during the year	25	17	42

EXPENDITURES.

1906-07.

Current expenses—

1. Salaries and wages.....	\$19,124 15
2. Clothing	
3. Subsistence	6,690 20
4. Ordinary repairs	2,287 16
5. Office, domestic and outdoor expenses.....	8,554 16

Total \$36,655 67

Extraordinary expenses—

1. New buildings, land, etc.....	
2. Permanent improvements to existing buildings.	

Total

Grand total\$36,655 67

NOTES ON CURRENT EXPENSES.

- Salaries and wages include salaries of trustees.
- Clothing includes shoes and also materials for clothing and shoes made in the institution.
- Ordinary repairs include all of those which simply maintain the buildings in condition without adding to them. Any repairs which are of the nature of additions are classed with "permanent improvements."
- This item includes everything not otherwise provided for, e. g., furniture, bedding, laundry supplies, medicines, engineer's supplies, postage, freight, library, etc.

GEORGE S. WILSON, Supt.

GENERAL.

There have been but few changes in teachers and officers. Miss Schellschmidt was granted a leave of absence at the close of the school year for the purpose of continuing the study of music in Berlin. Her place is filled during her absence by Mr. Adolph Schellschmidt. Miss Hunt resigned and was succeeded by Miss Barttlingck. During the past year the work has been harmonious and successful in every department.

It has been repeatedly advertised that this is a school and that its work is purely educational in character and designed to impart to the blind of the State, of school age, a practical literary education, and such skill in music, and dexterity in handicraft, as will enable them to live without burden to the State and with happiness and satisfaction to themselves. It is not a hospital for the treatment of diseases of the eye, nor a retreat for the indigent. This purpose has again been emphasized by the last legislature in the change of name from "Institution" to "School" and in withdrawing it completely from the benevolent classification and placing it with the public schools in the following plain and emphatic language: "And said Schools for the Deaf and for the Blind shall not be regarded nor classed as benevolent or charitable institutions but as educational institutions of the State, conducted wholly as such."—Chapter 98, section 2, Acts of General Assembly of 1907. The purpose ought not now to be misunderstood.

Sincerely,

GEO. S. WILSON.

**LIST OF INSTITUTIONS FOR THE EDUCATION OF THE BLIND
IN THE UNITED STATES.**

- Alabama Institution for the Deaf, Dumb and Blind, Talladega, Ala.—J. H. Johnson, Principal.
- Alabama School for the Blind, Talladega, Ala.—F. Manning, Superintendent.
- Alabama School for Negro Deaf Mutes and Blind, Talladega, Ala.—J. S. Graves, Superintendent.
- Arkansas School for the Blind, Little Rock, Ark.—T. A. Futrell, Superintendent.
- California Institution for the Education of the Deaf and Dumb and Blind, Berkeley, Cal.—W. Wilkinson, Principal.
- Colorado School for the Deaf and the Blind, Colorado Springs, Col.—W. K. Argo, Superintendent.
- Connecticut School for the Blind, Hartford, Conn.—G. A. Marshall, Superintendent.
- Florida School for the Blind, Deaf and Dumb, St. Augustine, Fla.—A. H. Walker, President.
- *Georgia Academy for the Blind, Macon, Ga.—G. F. Oliphant, Principal.
- Idaho State School for the Blind, Boise City, Idaho.—J. Watson, Superintendent.
- Illinois School for the Blind, Jacksonville, Ill.—G. W. Jones, Superintendent.
- Indiana School for the Blind, Indianapolis, Ind.—Geo. S. Wilson, Superintendent.
- International School for the Blind, Fort Gibson, Ind. Ter.—Mrs. Lura A. Lowrey, Superintendent.
- Iowa College for the Blind, Vinton, Iowa.—J. E. Vance, Principal.
- Kansas Institution for the Education of the Blind, Kansas City, Kan.—W. B. Ball, Superintendent.
- *Kentucky Institution for the Education of the Blind, Louisville, Ky.—B. B. Huntoon, Superintendent.
- Louisiana Institution for the Blind, Baton Rouge, La.—W. W. Bynum, Superintendent.
- *Maryland School for the Blind, Baltimore, Md.—John F. Bledsoe, Superintendent.
- Massachusetts School and Perkins Institution for the Blind, South Boston, Mass.—E. E. Allen, Director.
- Michigan School for the Blind, Lansing, Mich.—Clarence E. Holmes, Superintendent.
- Minnesota School for the Blind, Faribault, Minn.—J. J. Dow, Superintendent.
- Mississippi Institution for the Blind, Jackson, Miss.—W. S. Sims, Superintendent.
- Missouri School for the Blind, St. Louis, Mo.—S. M. Green, Superintendent.
- Montana School for the Deaf and Blind, Boulder, Mont.—L. E. Milligan, Superintendent.

*Has a department for the colored blind.

- Nebraska Institution for the Blind, Nebraska City, Neb.—J. T. Morey, Superintendent.
- New Mexico Institution for the Blind, Alamogordo, N. M.—S. H. Gill, Superintendent.
- New York Institution for the Blind, New York, N. Y.—Everett B. Tewksbury, Principal.
- New York State School for the Blind, Batavia, N. Y.—C. A. Hamilton, Superintendent.
- *North Carolina School for the Deaf and Blind, Raleigh, N. C.—John E. Ray, Principal.
- Ohio State School for the Blind, Columbus, Ohio.—Edwin N. Brown, Superintendent.
- Oregon Institute for the Blind, Salem, Ore.—E. T. Moores, Superintendent.
- Pennsylvania Institution for the Instruction of the Blind, Overbrook, Pa.—O. H. Burritt, Superintendent.
- *South Carolina Institution for the Education of the Deaf and the Blind, Cedar Spring, S. C.—N. F. Walker, Principal.
- School for the Blind, Gary, S. D.—Miss Mary E. Wood, Superintendent.
- *Tennessee School for the Blind, Nashville, Tenn.—J. V. Armstrong, Superintendent.
- Texas State Institution for the Blind, Austin, Tex.—S. L. Hornbeak, Superintendent.
- Texas Institution for the Deaf, Dumb and the Blind (Colored), Austin, Tex.—V. D. Lane, Superintendent.
- State School for the Blind, Ogden, Utah.—Frank M. Driggs, Superintendent.
- Virginia Institution for the Education of the Deaf and Dumb and of the Blind, Staunton, Va.—W. A. Bowles, Principal.
- Washington School for the Blind, Vancouver, Wash.—Thos. P. Clarke, Superintendent.
- Western Pennsylvania Institution for the Blind, Pittsburgh, Pa.—Thos. S. McAloney, Superintendent.
- West Virginia School for the Deaf and the Blind, Romney, W. Va.—Jas. T. Rucker, Principal.
- Wisconsin School for the Blind, Janesville, Wis.—Harvey Clark, Superintendent.

*Has a department for the colored blind.

POPULATION OF INSTITUTIONS FOR THE EDUCATION OF THE BLIND IN THE UNITED STATES.

STATES HAVING INSTITUTIONS FOR THE BLIND.	Pupils in 1885.	Pupils in 1886.	Pupils in 1887.	Pupils in 1888.	Pupils in 1889.	Pupils in 1890.	Pupils in 1891.	Pupils in 1892.	Pupils in 1893.	Pupils in 1896.	Pupils in 1897.	Pupils in 1898.	Pupils in 1899.	Pupils in 1900.	Pupils in 1901.	Pupils in 1902.	Pupils in 1903.	Pupils in 1904.	Pupils in 1905.	Pupils in 1906.	Pupils in 1907.
Alabama.....	29	30	34	34	53	56	54	63	62	66	77	70	82	92	92	79	85	89	93	99	93
Alaska.....																					
Arkansas.....	44	78	70	78	168	165	165	176	225	158	169	172	193	208	193	202	207	204	175	169	26
California.....	32	27	31	34	36	35	35	42	50	48	48	50	53	53	53	57	63	74	76	80	81
Colorado.....	10	20	19	21	29	33	42	48	47	53	53	50	55	55	45	47	55	54	50	33	42
Connecticut.....																					
Florida.....	2																				
Georgia.....	81	75	82	93	85	85	89	95	103	121	138	123	116	109	108	95	104	104	106	32	38
Idaho.....																					
Illinois.....	150	168	186	171	165	185	218	241	238	262	254	220	220	251	263	254	249	247	217	220	11
Indiana.....	126	130	132	128	132	128	139	139	150	150	128	139	137	10	17	17	12	12	10	12	218
Indian Ter.....																					
Iowa.....	151	170	187	157	177	171	184	167	169	180	197	208	186	192	180	150	166	185	185	188	183
Kansas.....	68	78	87	88	93	77	83	90	94	90	92	102	91	98	103	102	101	100	105	103	95
Kentucky.....	72	69	71	85	101	105	107	105	109	113	119	114	121	116	122	133	132	140	136	134	146
Louisiana.....	22	21	19	20	24	30	30	36	36	36	36	39	33	48	52	43	49	47	43	51	50
Maryland.....	89	87	88	95	109	122	112	115	119	122	122	125	125	134	132	125	134	134	127	95	93
Massachusetts.....	135	149	154	177	217	223	176	198	195	212	216	257	246	236	238	240	250	249	256	266	291
Michigan.....	74	83	95	84	85	77	79	95	105	106	109	114	123	130	130	120	121	120	118	115	119
Minnesota.....	39	36	47	50	57	64	63	64	58	63	67	73	70	79	90	85	88	83	91	91	100
Mississippi.....	33	36	31	35	32	36	32	40	38	39	34	41	33	33	34	37	48	40	37	46	46
Missouri.....	94	97	95	68	87	99	119	116	117	121	110	106	121	119	126	120	112	112	101	97	104
Montana.....																					
Nebraska.....	29	38	27	38	45	57	56	59	100	88	109	62	78	83	75	86	59	62	61	63	58
New Mexico.....																					21
New York City.....	247	280	235	248	235	237	247	245	242	239	244	230	229	223	209	187	192	185	171	182	156
New York State.....	171	163	159	140	126	131	148	139	147	162	142	142	131	143	151	137	136	135	147	149	152
North Carolina.....	64	76	80	88	102	86	89	89	98	107	137	173	181	214	232	231	224	236	260	250	261
Ohio.....	223	233	232	250	264	230	224	218	228	265	241	281	301	338	330	339	337	314	341	321	307
Oregon.....	13	13	11	15	8	7	18	18	22	20	23	27	24	28	22	27	29	34	33	31	43
Pennsylvania.....	232	245	232	242	232	230	196	201	196	190	186	185	175	174	170	183	187	205	205	210	216
South Carolina.....	15	15	21	18	21	32	34	36	41	44	42	43	48	49	50	47	49	51	58	77	77
South Dakota.....																					
Tennessee.....	81	74	71	78	88	91	89	98	93	106	122	106	115	130	158	206	242	250	251	255	206
Texas.....	105	112	121	121	138	144	164	171	171	161	157	164	169	160	177	185	193	180	185	239	251
Texas Colored.....																					
Utah State School for the Blind.....																					
Virginia.....	38	47	45	50	50	50	35	51	48	50	52	52	56	58	63	62	68	65	68	70	70
Washington.....																					
West Virginia.....																					
Wisconsin.....	32	31	33	35	34	36	34	35	36	41	51	56	53	53	43	47	53	52	51	53	26
Wisconsin.....	66	74	82	90	90	90	90	90	103	120	113	120	121	132	120	117	119	104	105	101	108
Total.....	2,567	2,747	2,773	2,832	3,096	3,173	3,203	3,353	3,515	3,630	3,757	3,793	3,869	4,097	4,130	4,197	4,239	4,346	4,350	4,422	4,463

Per capita \$2.20 +.

The Indiana State School for the Deaf

SIXTY-FOURTH ANNUAL REPORT

OF THE

TRUSTEES and the
SUPERINTENDENT

FOR THE

Fiscal Year Ending September 30, 1907

TO THE GOVERNOR

INDIANAPOLIS

WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING

1908



THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
February 14, 1908. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, February 14, 1908. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

JOHN C. BILLHEIMER,
Auditor of State.

FEBRUARY 20, 1908.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, February 20, 1908.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer February 21, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.

THE INDIANA
STATE SCHOOL FOR THE DEAF,
INDIANAPOLIS.

*To the Honorable J. FRANK HANLY, Governor of the State of
Indiana:*

Sir—In compliance with law, and by direction of the Board of Trustees, I have the honor to lay before you the annual report of the Board and Superintendent for the fiscal year ending September 30, 1907.

Respectfully,

WILLIAM P. HERRON,
Secretary.

BOARD OF TRUSTEES.

PRESIDENT.

HENRY B. BROWN.....Valparaiso.
Term expires January 1, 1909.

VICE-PRESIDENT.

ELE STANSBURY.....Williamsport.
Term expires April 10, 1911.

TREASURER.

WILLIAM W. ROSS.....Evansville.
Term expires January 1, 1911.

SECRETARY.

WILLIAM P. HERRON*.....Crawfordsville.
Term expires January 1, 1908.

*Reappointed January 1 for four years ending January 1, 1912.

EDUCATIONAL.

RICHARD O. JOHNSON.....SUPERINTENDENT.

INSTRUCTORS.

Supervising Principal Primary Grades..Evalyn B. Heizer.
 Supervising Principal Oral Work.....Frances L. Glenn.
 Supervising Teacher Industries
 Superintendent Sabbath School.....William H. DeMotte, M.A., LL.D.
 Secretary Sabbath School.....Henry Bierhaus.
 Leader Christian Endeavor Societies.. }
 Curator Museum, etc..... } Utten E. Read, M.A.
 LibrarianAlbert Berg, M.A.
 Director Physical Exercise.....August Jutt.
 Teachers' Training Class, in charge of. { Frances L. Glenn.
 { Amelia DeMotte.

MANUAL CLASSES.

William H. DeMotte, M.A., LL.D.	Anna Hendricks.
Sidney J. Vall.	Ida B. Kinsley.
Henry Bierhaus.	Frances Thompson.
August Jutt.	Ida B. Westfall.
N. Field Morrow, B.A.	Fannie B. Shideler.
Orson Archibald, B.A.	Olive Sanxay.
Albert Berg, M.A.	

ORAL CLASSES.

Utten E. Read, M.A.	Jolliette E. Constantine.
Nora V. Long.	Nelle E. Arbaugh.
Amelia DeMotte.	Nancy B. Read.
Margaret I. Bolyn.	Floss A. Behymer.
Frances L. Glenn.	Maude Carter.
Emma Roberts.	

KINDERGARTEN CLASSES.

Nellie J. Schrock in charge.

In training	{ Louise O. Sims.
	{ Blanche Van Deveer.
	{ Nelle C. LaGrange.

DRAWING AND ART CLASSES.

Mary Corwin.

EDUCATIONAL-INDUSTRIAL CLASSES.

Printing, etc.	Will G. Ross.
Woodworking, etc.	John P. Baker.
Harnessmaking	} N. Lee Harris.
Shoe and Leather Work.....	
Tinsmithing	
Domestic Science {	Cooking
{	Sewing .....Kate Gorman.

BUSINESS AND HOUSEHOLD.

SUPERINTENDENT	RICHARD O. JOHNSON.
Secretary to Superintendent.....	Bertha M. Tudor.
Auditor	Clarence A. Carl.
Storekeeper	William E. Todd.
Matron	Mrs. C. E. Johnson.
Assistant Matron and Housekeeper.....	Mary E. Cook.
Physician	Charles S. Goar, M.D.
Supervisors of Boys.....	Albert F. Bales.
	James Vahey.
	Thomas Matthews.
	Rika Vahle.
Supervisors of Girls.....	Mrs. Maggie McCauley.
	E. Blanche Malloy.
	Emma Ottenbacher.
Usher	A. Belle Handy.
Nurse	Ruth E. Cobbs.
Watchman	Perry Henderson.
Nightwoman	Addie Dyer.

INDUSTRIAL.

Foreman of Grounds.....	William Langstaff.
Engineer	Charles Hamant.
Electrician	L. Scott Clark.

TERM CALENDAR FOR 1907-1908.

Annual session begins September 25.

Annual session ends June 10.

First term ends November 30.

Second term ends January 31.

Third term ends June 6.

Grade days—December 1, February 1; second and third terms begin.

Mid-year examinations (written) begin January 20.

Final examinations (written) begin May 18.

Graduation exercises—June 10.

Departure for home—June 11.

HOLIDAYS FOR PUPILS.

November 28—Thanksgiving Day, Thursday.

December 25-26—Christmas, Wednesday, Thursday.

January 1—New Year, Wednesday.

February 22—Washington's Birthday, Saturday.

May 30—Decoration Day, Saturday.

June 9—Lawn social, Tuesday.

June 10—Graduation exercises, Wednesday.

June 11—Departure for home, Thursday.

LECTURE COURSE, 1907-1908.

October 5—

Albert Berg, "Noted Events of the Summer."

October 19—

William H. DeMotte, "The Value of the Man Who Knows."

November 2—

N. Field Morrow, "The Jamestown Exposition and What It Commemorates."

December 14—

August Jutt, "The World's Methods of Transportation."

January 4—

Sidney J. Vail, "Customs in China and Japan."

February 29—

Utten E. Read, "The Calendar Year."

March 14—

Henry Bierhaus, "Forms of Government Throughout the World."

April 18—

Orson Archibald, "Summer Travels."

May 23—

Albert Berg, "Noted Events of the Year."

LITERARY SOCIETIES, ETC.

The literary societies will meet during the year as follows:

Girls' Literary Society—November 16, January 25.

Johnson Literary Society (Boys')—December 7, March 7.

Joint Celebrations—January 11, April 11.

Practice Nights—Alternate Fridays.

PUPILS' PARTIES, ETC.

November 28—

Thanksgiving social.

December 25—

Christmas celebration and party.

January 1—

New Year social.

February 15—

Valentine masquerade party.

June 9—

Lawn social and supper.

HOLIDAYS FOR PUPILS.

November 28—

Thanksgiving Day.

December 25-26—

Christmas.

January 1—

New Year.

February 22—

Washington's birthday.

May 30—

Decoration Day.

June 9—

Lawn party.

On Thanksgiving, Christmas, New Year, Washington's Birthday and Decoration Day holidays, school and work for pupils will be suspended the entire day, and the usual exercises incident to the times will be observed.

REPORT OF BOARD OF TRUSTEES.

To the Honorable J. FRANK HANLY, Governor of Indiana:

Sir—The Board of Trustees of The Indiana State School for the Deaf respectfully submits the following report for the fiscal year ending September 30, 1907. Your attention is called to the fact that on account of the law enacted by the recent legislature the fiscal year ends September 30th, thus making this report cover a period of but eleven months.

For detailed information concerning receipts and disbursements for maintenance, industries and repairs; concerning clothing expense, farm and garden products raised, and cash earnings received; and for various other matters, fiscal and scholastic, and of interest to those concerned in the education of the deaf, your attention is called to statements and exhibits in the Superintendent's report, hereto attached and made part of this report.

The physical condition of the school is practically the same as reported last year. The Institution has been much embarrassed on account of not having sufficient allowance for repairs during the past four years. In order to meet absolute necessities, so that the buildings might be at all habitable, it has been found necessary to draw on the maintenance fund to supply these needs; and this, notwithstanding the fact that during the past year, as during the previous three years, on account of the anticipated change in the location of the institution, it has been the policy of the Board to expend as little money as possible on temporary improvements or repairs. The result is an advancing stage of deterioration and absolutely no fund at all for the future out of which to make the many small repairs necessary from time to time.

The work of the school proper has been of a higher grade during the past year than at any period in its history. The careful classification in the various grades, together with the latest and most approved methods of instruction, have secured the very best results. So far as we know, there are few schools where pupils have the advantage of such excellent training. In view of the fact that these young people without an education would be a burden upon society, but with proper training will be self-supporting, is it not a matter of wisdom and economy for the State to provide what is their just due—the very best facilities

possible for making this preparation? The institution is made not only a school but a home, and so satisfactory have all of the arrangements been that practically none of the pupils have left the school during the scholastic year. The entire aim of those in authority has been to surround them with an air of freedom and make the place as homelike as possible. The social features also receive the most careful attention. The pupils have the advantage of lectures, and entertainments of various kinds. The books, magazines, papers, etc., to which the pupils have access, are of such a character as to keep them thoroughly familiar with current events.

The conditions of the new law, with which you are familiar, the full text of which is to be found in the Superintendent's report, were complied with by you in the appointment of Mr. Ele Stansbury, of Williamsport, Indiana, to serve for a period of four years, or until April 10, 1911. You also reappointed Mr. William W. Ross, whose term had expired, to succeed himself as a member of the Board, his new term to expire January 1, 1911. Mr. Stansbury was elected vice-president and Mr. Ross re-elected treasurer of the Board of Trustees.

The new law also changed the name of the Institution to The Indiana State School for the Deaf, and specifically provided that it should not be regarded nor classed as a benevolent or charitable institution but as an educational institution of the State, conducted wholly as such. This we believe to be one of the most important acts of the last legislature. It is not a charitable or benevolent institution. It is educational in every particular, the same as any other public school in the State. This gives the school its proper place in our educational system. The pupils are not criminals, they are not insane, they are not incorrigible, they are not mental or moral defectives, they are not homeless, they are not objects of charity; they are simply students, and as such should not be obliged to pass under an assumed name for the purpose of securing that which is their right, an education, and which the State owes them as a matter of right.

On September 30, 1907, the Board reappointed Richard Otto Johnson as Superintendent of the Indiana State School for the Deaf to serve during his pleasure, or until removed by the Board of Trustees under due process of law. Superintendent Johnson had served the institution five years and nine months as secretary and eighteen years and three months as superintendent, and it is due to his thorough knowledge of the needs of such a school

and to his untiring efforts that the Indiana institution now ranks as one of the leaders in the work, whether in this country or Canada.

The regular and specific appropriation for the eleven months amounted in the aggregate to \$69,240.10; the total expenditures to \$68,858.25, leaving an unexpended balance of \$381.85. This unexpended amount, together with \$922.77 expended from our funds to be repaid to the State by counties for clothing furnished indigent pupils, and \$706.52 cash earnings received, amounting in all to \$2,011.14, was returned to the State's general fund and must stand to the credit of the institution against the total appropriation of \$69,240.10.

Referring to the building of the new institution, north of the city, the last Legislature made the following appropriations:

Boys' dormitories, including heating, electric wiring and plumbing	\$155,270 00
Girls' dormitories, including heating, electric wiring and plumbing	161,152 00
Mechanical equipment	20,000 00
Outside water and fire system	4,000 00
Architect's fees	19,355 00
Superintendent of construction	4,000 00
Advertisement, clerk, and miscellaneous expenses	3,500 00

Existing conditional-contracts with the various contractors were made positive for the dormitory groups and for the mechanical equipment, such eliminations being made as were necessary to bring the cost within the appropriations as made. These contracts now stand as follows:

Boys' dormitories	\$152,798 69
Girls' dormitories	158,677 13
Mechanical equipment	19,940 00

The contractors for this work are Heinzmann Brothers, general construction; Sanborn & Marsh, electric wiring; Kirkhoff Brothers & Company, plumbing; Woollen & Callon, heating and mechanical equipment.

The original contract for plumbing for the whole work was with J. S. Farrell & Company, who later failed in business and were unable to do and perform that which they had contracted to do. Their bondsmen then presented other contractors who agreed to assume the contracts of J. S. Farrell & Company at their same figures and obligations, and contracts with them were duly entered into as follows:

With Hayes Brothers & Company, for school house, dining hall and kitchen-bakery and power house.

With Kirkhoff Brothers & Company, for boys' and girls' dormitories.

The corner-stone of the new school house was laid with impressive ceremonies by the Commission, all members being present, on Friday afternoon, May 31st, a full account of which will be found in the Superintendent's report.

While the progress on the new buildings has not been as great as desired, yet it has been quite satisfactory, and it is confidently believed that by the close of the year 1908 all of the buildings for which positive contracts have been given will be practically completed. It is but just to say that every one who has visited the new institution and familiarized himself with the plans, has had nothing but words of commendation. The universal statement has been that while the present expenditure may seem great, yet in the end it will prove to be one of the most economical investments the State has ever made.

This report would not be complete did we not extend to your Excellency our most sincere thanks for your helpful aid at all times given us in our labors, for the deep and abiding interest you have ever taken in the building of the new institution, and for the splendid address delivered by you at the graduation exercises in June, all indicating your unswerving devotion to the cause of education for the deaf. We, as well as the deaf of our State, appreciate it.

Respectfully submitted,

HENRY B. BROWN,
ELE STANSBURY,
WILLIAM W. ROSS,
WILLIAM P. HERRON.

SUPERINTENDENT'S REPORT.

To the Board of Trustees:

Gentlemen—I submit for your consideration the following statement concerning financial transactions and scholastic record of the Indiana State School for the Deaf for the fiscal year ending September 30, 1907, it being my nineteenth annual report as Superintendent and the sixty-fourth annual report of the school.

CHANGE IN FISCAL YEAR.

Under a recent law (Acts 1907, p. 228) the fiscal year is made to end September 30, instead of October 31, as heretofore. The present report, therefore, covers but eleven months, and because of this shortening of the year all appropriations therefor were reduced one-twelfth and that amount was returned unused to the general fund of the State treasury. All references herein to the fiscal year for 1907 must be understood as covering eleven months only.

APPOINTMENT OF TRUSTEES.

During the year Mr. Ele Stansbury was appointed by the Governor to serve as the fourth member of the Board of Trustees under the provisions of the new law referred to below, his term being for four years, or until April 10, 1911; under the same law Governor Hanly also reappointed Mr. William W. Ross to succeed himself as a member of the Board, his term having expired, the new term being for four years, or until January 1, 1911.

NEW LAW CONCERNING MANAGEMENT.

Another new law (Acts 1907, p. 138) was enacted by the last general assembly concerning the names, management, and control of the state benevolent, reformatory and penal institutions, defining the powers of the boards of trustees, and manner of their appointment, concerning appointment of superintendent and subordinates and their discharge, concerning purchase of supplies, prohibiting campaign assessments, providing penalties, and repealing all laws and parts of laws in conflict therewith. This law is

set out in full in a subsequent part of this report* and a careful reading thereof is urged because of the radical changes made in the old law, every change making for the betterment of Indiana's institutional service and placing her in the lead of other states in this as in other lines of public advancement.

One of the most important features of this law is the provision in section two changing the name of this institution to *The Indiana State School for the Deaf*, and providing that this and The School for the Blind "shall not be regarded nor classed as benevolent or charitable institutions, but as educational institutions of the state, conducted wholly as such."

This declaration marks a most important advancement on the part of Indiana as to the legal status of the deaf and their education and gives to this school its just and proper standing as an educational institution. The privilege of an education is the birth-right of every American child, which the state for its own protection stands ready to grant as its first great duty; and this education, entailing future duties and responsibilities upon its recipient, is one to be received by the child and given by the state, as a matter of right, not of charity. The deaf child has the same inalienable right to an education as his more fortunate brother who hears, is just as capable of advancement, and is no more a ward of the state, or a recipient of charity, than is this same hearing-brother attending the public school. The deaf, and their parents and friends, object to their constant association and comparison with the feeble-minded, the epileptic and insane, the incorrigible and criminal; and resent their being referred to as "defectives," a term commonly made use of to designate mental, moral and physical degeneracy.

In this connection it may be added that while Indiana was the seventh state in the Union to establish a state school for the deaf (1844) it was the first to levy a direct tax upon the people for such purpose and the first to throw open its school doors to the deaf absolutely without cost to them; and in its moral and material progress, Indiana has received of the deaf abundantly for all that it has given them. Now, again, Indiana stands to the front in declaring by legal enactment that the conduct of its state school for the deaf shall not be considered as an expression of benevolence or charity upon the part of the state.

*Page 45.

CONCERNING OFFICIAL ROSTER.

The roster of officers, teachers, attendants and employes varies somewhat from that of one year ago. Among the teachers in the literary department, Miss Olive Hawkins has retired, and Misses Floss A. Behymer and Maude Carter, of last year's normal class, have been added to the corps. In the industrial department, Mr. Edward J. Hecker, who for seventeen years had served as editor of the school paper, *The Silent Hoosier*, and as instructor in typography, with great satisfaction to all concerned, resigned in June to enter into business for himself. He is succeeded by Mr. Will G. Ross, who comes to the work well equipped in every way. The normal class this year consists of Miss Louise O. Sims, who is completing her second year in training, and Misses Blanche Van Deveer and Nelle LaGrange, who have just entered for the first year of the course.

Miss Nellie M. Voorhees, secretary to the Superintendent, who resigned to be married, has been succeeded by Miss Bertha M. Tudor; Earl E. Patterson and Lonnie Whitesides, Boys' Supervisors, and Gertrude Schad, Girls' Supervisor, have been succeeded by Albert F. Bales, Thomas Matthews and Emma Ottenbacher; Katherine Ogilvie, nightwoman, has been succeeded by Addie Dyer, and Louis J. Prinzier, engineer, after forty-five years of service, by Charles Hamant, who had been his assistant. Various other changes have occurred in subordinate places not necessary to mention.

ADMISSION, ATTENDANCE, ETC.

The following tabulations will show admissions, discharges, attendance and nonattendance for the year:

	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Actual attendance November 1, 1906.....	172	153	325
Late in returning		2	2
New pupils received during the year.....	12	11	23
Readmitted after absence of year or more.....	3	4	7
	<hr/>	<hr/>	<hr/>
Total enrollment during the year.....	187	170	357
Discharged during year.....	12	16	28
	<hr/>	<hr/>	<hr/>
Leaving enrolled for new year.....	175	154	329
Actual attendance September 30, 1907.....	140	134	274
	<hr/>	<hr/>	<hr/>
Showing absentees from last school year.....	35	20	55

CAUSE OF DISCHARGE.

	<i>Boys.</i>	<i>Girls,</i>	<i>Total.</i>
Inability	1	...	1
Death	1	1	2
Improper conduct	2	...	2
Expiration of time.....	1	1	2
Absence	1	2	3
Graduation	6	12	18
Totals	12	16	28

CAUSES OF NONATTENDANCE.

Weak eyes .....	..	1	1
Sickness in family	1	..	1
Death	1	..	1
Parents unwilling	1	..	1
Removal from state.....	2	1	3
Working	3	..	3
Household work at home.....	..	4	4
Poor health	3	2	5
Tired of school.....	2	3	5
No cause assigned	5	3	8
Coming later	17	6	23
Totals	35	20	55

RESIDENCE OF PUPILS.

Your attention is called to a tabulated statement, arranged by counties, in a subsequent part of this report, showing the number of pupils received, the number discharged and the number remaining entitled to the benefits of the school. The number entitled to its benefits is larger than the number shown at the end of any one year, for this statement refers only to those who have been in attendance at some time during the fiscal year, those of the preceding years, although entitled to readmission, being dropped from consideration—these number about 30 yearly. An inspection of the statement will show that pupils have been received from eighty-two of the ninety-two counties, those not represented being Benton, Brown, Crawford, Decatur, Franklin, Jennings, Parke, Scott, Union and Warren.

INFIRMARY MATTERS.

The case record below shows 400 cases registered in the infirmary during the year, 197 boys and 203 girls. An inspection of the list shows that of the total number recorded there were 89 cases of skin eruption (measles 40, varicella 16, eczema 15, dermatitis 11, miscellaneous 7); 103 mumps*; 46 coryza; 44 tonsillitis; 10 pneumonia; 2 bronchitis; 8 conjunctivitis; 34 indigestion; 6 accidents; 9 earache; 2 malaria; and 53 with various afflictions.

During the year it became necessary to employ a special nurse at various times to properly care for contagious or serious cases needing isolation and constant attention, at a total cost of \$165.00 for 66 days' service, and this amount was charged to drugs, medicines and appliances.

One death occurred during the year. On Tuesday morning, May 7, Clara Hazel Miller, nine years of age, a first-year pupil from Osceola, St. Joseph county, died of pneumonia, with measles as contributing cause. The body was interred in the school lot in Crown Hill Cemetery, Indianapolis.

INFIRMARY CASE RECORD.

	Boys.	Girls.	Total.
Abscess	1	..	1
Accident	5	..	5
Adenitis	1	..	1
Anemia .....	..	1	1
Autointoxication .....	..	1	1
Bronchopneumonia .....	..	3	3
Bronchitis .....	..	2	2
Catarrh .....	..	1	1
Conjunctivitis	1	6	7
Conjunctivitis, acute	1	..	1
Coryza	17	29	46
Dermatitis	2	9	11
Earache	5	4	9
Eczema	7	8	15
Endocarditis	1	..	1
Epilepsy	2	..	2
Fracture of the tibia.....	1	..	1
Furuncle	3	..	3
Headache	2	2	4
Indigestion	8	26	34

*Reported in last annual report in foot note.

	Boys.	Girls.	Total.
Infected finger	1	1	2
Infected hand .....	..	1	1
Infected jaw bone.....	1	..	1
Ingrowing toe nail.....	..	1	1
Laryngitis	1	..	1
Malaria	1	1	2
Measles	19	21	40
Mumps	57	46	103
Neuralgia	2	4	6
Orchitis	5	..	5
Periostitis	1	..	1
Pleurisy	1	..	1
Pneumonia, Lobar	3	4	7
Rheumatism	5	4	9
Sore toe .....	..	1	1
Tonsillitis	21	23	44
Toothache	6	2	8
Tuberculosis, incipient	1	..	1
Varicella	15	1	16
Totals	197	203	400

GRADUATIONS.

At the close of the school year in June, the usual commencement exercises were held, six young men and twelve young women who had completed the full course of study being presented for graduation honors. Their names, residence and subjects of essays or recitations, follow:

Sentiment—"They must move upward still, and onward, who would keep abreast of Truth."

Essay, "The Vision of Sir Launfal"

Rollin Otis Yoder, Shipshewana

Recitation (Oral) "The Bugle Song" (Alfred Tennyson)

Erma Reh Clites, Indianapolis

Essay, "Booker T. Washington"

William Henry Bond, Evansville

Concert Recitation, "The Heritage" (James Russell Lowell)

Matthew Lawrence Ralston, Brooksborg

Glenn Butler, Huntington

Henry Brancomb Mutter

Essay (Oral), "The Hoosier Poet"

Turner Thompson Blackwood, Sandborn

Essay, "The Lady Bountiful of England"

Hazel Atlanta Wasson, Bluffton

Concert Recitation, "My Country—'Tis of Thee" (Samuel Francis Smith)

Amy Wilhelmina Martin, Indianapolis

Leah Frances Sawyer, Bluffton

Ethel Brenton, Southport

Grace Delphia Buhler, Decatur

Essie May Gatton, Winslow

Cecilia Dorothy Barrett, Middletown

Carrie Mabel Johnson, Kokomo

Leria Blanche Nipple, Camden

Eula Belle Hetzler, Angola

Pansy Gertrude Arnot, Delphi

The address of the day was delivered by the Hon. J. Frank Hanly, Governor of the State, and presentation of diplomas made by the Hon. Henry B. Brown, president of the Board of Trustees. Governor Hanly's address reflects so much of the onward movement in the cause of education for the deaf in this state, and toward which he himself has contributed not a little, that it is given in full in a succeeding part of this report.* On Sunday morning, June 2, the baccalaureate sermon was delivered by the Rev. Austin W. Mann, of Cleveland, Ohio, who was graduated from this school in 1858.

NATIONAL ASSOCIATION OF THE DEAF.

Among the many conventions of national character meeting during the past summer was one held by the deaf of the United States at Norfolk, Virginia, July 4-6. At this convention of the National Association of the Deaf were delegates representing all parts of the United States. At the close of the convention, after most careful consideration, a series of preambles and resolutions pertaining to the welfare of the deaf, during both school years and afterwards, were adopted. These preambles and resolutions, copied in full in another part of this report,** constitute a veritable Bill of Rights adopted by the deaf and clearly outline the national thought in the matter.

Asking for what is due them as a matter of right and justice and earnestly insistent therefor, yet in order to attain the much-to-

*See page 38.

**See page 43.

be-desired end, the deaf everywhere must be prepared to meet the demands to be made upon not only themselves but upon the mass of mankind to whom equal rights are accorded. "*By our deeds—not deafness—shall we be known*" should be the motto of every deaf person; and these deeds should be prompted by studious habit and intelligent progress in school, moral and industrious lives during and after school life, and active participation in all that makes for the betterment of mankind. Extreme segregation as a class and claims through sympathy and benevolence for special privileges not accorded others should be avoided. The deaf should know that added rights mean added duties and they must show both willingness and ability in the performance of their duties. They must ever strive for capacity, culture and character; and in their efforts there must be courage and constancy in order to achieve the conquest.

THE NEW INSTITUTION.

Continuing the story of the building of the new institution on Forty-second street, reference to which has been made in detail in the last three annual reports of the school, it is to be reported further that the last General Assembly made additional appropriations for the purpose, as follows:

Boys' dormitories, including heating, electric wiring, and plumbing	\$155,270 00
Girls' dormitories, including heating, electric wiring, and plumbing	161,152 00
Mechanical equipment	20,000 00
Outside water and fire system.....	4,000 00
Architect's fees	19,355 00
Superintendent of construction.....	4,000 00
Advertisement, clerk, and miscellaneous expenses.....	3,500 00

After this, the existing conditional-contracts with the various contractors were made positive ones for the dormitory groups and for mechanical equipment, such eliminations being made as were necessary to bring the cost within the appropriations as made. These contracts stand as follows:

Boys' dormitories, three buildings and connections.....	\$152,798 69
Girls' dormitories, three buildings and connections.....	158,677 13
Mechanical equipment	19,940 00

The contractors for this work are Heinzmann Brothers, general construction; Sanborn & Marsh, electric wiring; Kirkhoff Brothers & Company, plumbing; Woollen & Callon, heating and mechanical equipment.

The original contract for plumbing on the whole work was with J. S. Farrell and Company, who later failed in business and were unable to do and perform that which they had contracted to do. Their bondsmen then presented other contractors who agreed to assume the contracts of J. S. Farrell and Company at their same figures and obligations, and contracts and bonds with them were duly entered into as follows:

With Hayes Brothers and Company, for school house, dining hall and kitchen-bakery, and power house.

With Kirkhoff Brothers and Company, for boys' and girls' dormitories.

LAYING OF CORNER-STONE.

The corner-stone of the new school house was laid with impressive ceremonies by the Commission, all members being present, on Friday afternoon, May 31, 1907, the following programme being carried out in a gently-falling rain:

Address*	Supt. Richard O. Johnson
	"The Education of the Deaf."
Remarks.....	Governor J. Frank Hanly, President of Commission
America	Recitation by Pupils
Reminiscences	Dr. William H. DeMotte
Remarks	Dr. Henry B. Brown, President Board of Trustees
Original Poem**.....	Miss Olive Sanxay
	"The Dream and the Deed."
Laying of Stone.....	By the Governor
Original Ode**.....	Entire School in Signs
	"An Invocation."
The Star-Spangled Banner.....	Recitation by Graduating Class of 1907
Evergreen Parade	By the School
Benediction	Dr. William H. DeMotte

About five hundred people, including the pupils, were grouped in semicircle around the southwest corner of the building, where the stone was set in place by Governor Hanly, who, after spreading the mortar and securely setting the cap-stone, said: "In the name of the people of the State of Indiana I lay the corner-stone of this building, to be dedicated hereafter to the education of the deaf children of the state."

To which was added by the Superintendent, as he stepped to the stone:

"And so today, over this corner-stone, and in the gently-falling rain as a benign benediction, let us christen The Indiana State School for the Deaf, reared solely for educational purposes, to the glory of God and the welfare of the state."

*See page 27.

**See page 37.

APPROPRIATIONS AND EXPENDITURES.

The appropriations, expenditures, balances unexpended, and returns made to the general fund of the state treasury for the fiscal year will be shown in Exhibit No. 1, following, and itemized accounts of expenditures, to whom paid and when, and concerning clothing furnished, cash earnings received, etc., are shown in other succeeding exhibits.

It is to be noted in this connection that the appropriations for the full fiscal year of twelve months were as follows: Maintenance, \$70,000; Industries, \$4,500.00; Repairs, \$1,000.00; but that on account of the change in the year, one-twelfth of each amount was deducted by law and made unavailable for use, to wit: Maintenance, \$5,833.33; Industries, \$375.00; Repairs, \$83.33.

The regular and specific (excess maintenance) appropriations for the eleven months amounted in aggregate to \$69,240.10, the total expenditures to \$68,858.25, leaving unexpended \$381.85. This unexpended balance, together with \$922.77, expended from our funds and to be repaid to the state by counties for clothing furnished indigent pupils, and \$706.52 cash earnings received, amounting in total to \$2,011.14, was returned to the state's general fund, and must stand to the credit of the Institution against the total appropriation of \$69,240.10.

Under the law allowing us \$195 per capita per annum for each pupil present over a daily average of 322 each month, there was an excess maintenance appropriation (included above) granted during the year amounting to \$31.76 for the month of November, 1906.

APPROPRIATIONS 1907-1909.

The regular appropriations for each year of the biennial term beginning October 1, 1907, and ending September 30, 1909, were fixed by the last General Assembly as follows:

For maintenance, each year	\$70,000 00
For industries, 1907-08	4,500 00
For industries, 1908-09	6,000 00

And in addition thereto, for maintenance, "\$195.00 per capita per annum for each person actually present over a daily average number of 325 inmates each month."

It will be noticed that no provision has been made for current repairs. Prior to four years ago there was an annual appropria-

tion of \$4,000.00 for this purpose. During the past four years this amount was reduced to \$1,000.00 annually (last year to \$916.67), thus prohibiting repairs to the extent of \$12,083.33; and in consequence of this great reduction in the fund and the rapidly deteriorating condition of the buildings, and of steam and water lines, heating apparatus, etc., we now find ourselves in somewhat of a dilemma, which is emphasized by the fact that from this time on we shall have no fund provided at all out of which to pay for repairs absolutely necessary to keep the place in habitable, sanitary and presentable condition. To attend to these things recourse must be had to the Maintenance fund, which is insufficient for its own purpose. We asked of the last General Assembly \$73,000.00 for Maintenance and \$1,500.00 for repairs for each of the new years. Instead of the increase asked for we were given a double reduction in appropriations.

PER CAPITA EXPENSE, REGULAR FUNDS.

FOR FISCAL YEAR (11 MONTHS) ENDING SEPTEMBER 30, 1907.

Gross maintenance for year	\$64,187 16
Less value of clothing, etc., furnished indigent pupils and which will be refunded state by counties.....	\$922 77
Less cash earnings received and paid into general fund by school	706 52
	<hr/> 1,629 29
Net cost of maintenance	\$62,557 87
The cost of industries	3,754 65
The cost of repairs	916 44
	<hr/>
Total net cost to state for year	\$67,228 96
Average daily number of pupils	315.775
(Boys, 164.169; girls, 151.606.)	
Net per capita cost of maintenance*	\$198 109
The per capita cost of industries	11 890
The per capita cost of repairs	2 900
	<hr/>
Total net per capita cost†.....	\$212 899

During the year the number of different pupils enrolled was 357. If this number be used as the divisor, the net per capita cost would be \$188.31 instead of \$212.89—the gross per capita cost \$192.88 instead of \$218.05.

*Gross per capita cost, \$203.268.

†Total gross/per capita cost, \$218.058.

CONCLUSION.

In conclusion, your attention is called to Course of Study in Detail, to Rules Concerning Admissions, to a statement showing Pupils by Counties, to Roster of Pupils, and to Exhibits 1 to 11, inclusive, giving classified and itemized statement of a fiscal nature for the year ending September 30, 1907, all of which are hereinafter set out and made part of this report.

Respectfully submitted,

RICHARD O. JOHNSON,
Superintendent.

CORNER-STONE ADDRESS.

BY RICHARD O. JOHNSON, SUPERINTENDENT, MAY 31, 1907

THE EDUCATION OF THE DEAF.

We are met today to lay the corner-stone of the school house, the main building of the new Indiana State School for the Deaf. We are all cognizant of existing conditions, but perhaps a little uncertain as to the past history of the great cause for which this institution stands. Under the circumstances, a brief sketch of the work will prove appropriate and interesting.

But permit me first to speak briefly of the work we see before us.

In preparing the way for the building of this new institution, the grounds now and for fifty-seven years occupied by the school, were sold most advantageously in September, 1904, by the commission previously appointed by legislative enactment for the purpose of selling the old location, purchasing a new site and erecting new buildings thereon. At that time, Hon. Winfield T. Durbin and Hon. Charles W. Miller were serving respectively as Governor and Attorney-General of the state and, ex officio, as members of the commission, the former as president, the latter as secretary; and both evinced great interest in the performance of their duties in the matter. Search was made from time to time for a desirable site, but no selection was made until in May, 1905, when the present location was purchased. In the meantime, Governor J. Frank Hanly succeeded Governor Durbin in office and was elected president of the commission.

In referring to Governor Hanly, I wish to speak of him as the sincere friend and well-wisher of the school and of those for whom the school stands—the deaf boys and girls scattered throughout the ninety-two counties of our great and prosperous state.

In the planning of this noble group of buildings, now in course of erection, he has from the very first vied with the other members of the commission in giving each and every step—the purchase of the site, the adoption of plans and specifications, and the erection of the work—the most searching investigation and careful supervision, all the time insisting upon such economy in cost as was commensurate with the actual needs of the school; but these needs measured or viewed from the standpoint of the requirements of an educational institution. The call, it was insisted, was for an institution of sufficient capacity and equipment, and of such stability and permanence and appearance, as to stand for a century to come, a unified and completed whole, a credit to the cause and to the state, and not calling in the near future for specific appropriations to do over, or to undo, what had not been properly done, or to do that which should have been done but was not because of a false economy which inevitably results at the end in gross extravagance.

In all of this work he has found the same sincere interest as his own on the part and in the active co-operation of Attorneys-General Charles

W. Miller and James Bingham, and of the trustees of the school, Messrs. Henry B. Brown, William W. Ross, William P. Herron and Ele Stansbury, constituting with the Governor the commission charged with the responsibility of building the institution, all of them giving generously of their time without compensation in the careful and conscientious discharge of their duty; and not only of these gentlemen but of many other well-wishers of the deaf and their education whose judgment and advice were sought and acted upon from time to time as the plans progressed.

To them all, when this completed institution shall stand evidence of their labor performed, will praise be accorded on the part of the state, and of the deaf boys and girls growing, or grown, into man and womanhood.

EARLY CONDITIONS.

The history of the art of educating the deaf does not properly begin until the sixteenth century, for previous to this time we have no record, save in a few isolated and unimportant cases, of any attempt to educate them. And yet references to the deaf had been made and theories propounded and discussed as to their intellectual, moral, social, legal and industrial status by the great philosophers and physicians, by the writers of the Roman and medieval laws, and by the church, since the fifth century before the Christian era. Hippocrates and Galen, Aristotle and Pliny, the fathers of the church, and the noted jurists of ancient times, all discussed these matters only to recognize the deaf as without intelligence and incapable of instruction. The Talmud classed them with "the fool and the child," not responsible for their actions and as exempt from the ordinance of the law. The views of the early Christian church were adverse to their capacity for instruction. St. Augustine, through his interpretation of the Apostle's words, "faith cometh by hearing," considered them as excluded from the blessing of religious knowledge, because it could only be given and received by hearing; and in this he was followed by succeeding theologians.

IGNORANCE AS TO CAUSE OF DEAF-MUTISM.

And thus the situation continued through ancient and medieval times; and down almost to our own times, though in every-lessening degree, because of ill-conceived and ignorant yet tenaciously-held opinions of the great mass of mankind. The code of Justinian required guardians to be appointed for the deaf, as not being able to direct their own affairs. And even in our own present, with all its enlightened efforts, I sometimes see and hear and read of things in connection with the deaf which lead me to think that the influence of the past still casts its baneful shadows. There are those who still wish to serve as guardians! During all these long centuries all interpretation of the condition, "deaf and dumb," was based upon an erroneous idea which was insisted upon as true until comparatively recent times, viz.—that deaf-mutism or deaf-dumbness was the consequence of some defect in the organs of speech—that there was a physical relation, arising from a common cerebral origin, between the hearing and the organs of speech, and that a lesion of this was the only cause why dumbness should follow deafness in one born deaf.

The early writers held that the deaf were incapable of learning speech or of intellectual instruction and education, since speech, as they conceived it, was the only medium of education, a natural instinct and not an acquired art. Language, reason and speech were considered a triad, each member of which was inseparable from the others. Even writing was held to depend upon speech.

There is no evidence that the real connection of the two defects was ever understood; that is, that deafness is the cause and dumbness the effect; that while hearing is natural, speech is not and is acquired through the hearing by imitation of sounds heard. Today this is thoroughly understood, and based upon the fact that speech is not of itself natural but must be acquired, it is being taught to and mastered in varying degree by many of the deaf who can not hear a sound; and in addition to this mechanical speech, as it may be called, many with or without speech and totally deaf are being instructed in the art of reading speech (spoken words) from the lips of another by sight, illumined as it is by facial and bodily expression.

No normal person remembers when or how he learned to talk. From the time whereof his mind runneth not to the contrary, he has possessed thought and hearing and speech, the first presumably because of the second and third, for a wide-spread prejudice declares, "without verbal language, no understanding, no reason." But that this is a fallacy has long been proved, and Preyer, in a general conclusion, more truly states the case when he says: "It is not language that generated the intellect; it is the intellect that formerly invented language; and even now the human being brings with him into the world far more intellect than talent for language."

Deaf-mutes without hearing and speech have at their disposal "an elaborately developed mimic art that is extraordinary. They are pantomimists; and the height of culture such as a deaf-mute can reach proves at least that the existence of the intellect is not bound up with the hearing or learning of articulate speech."

SIXTEENTH CENTURY AWAKENING.

Beginning in the sixteenth century, the way being blazed by Cardan in Italy (1501-1576), the art of educating the deaf began practically in Spain with Pedro Ponce de Leon (1520-1584) and was taken up later in other European countries. Two distinct methods finally developed—the French, or sign method, fathered by Abbe de l'Epee (1712-1789), and the German, or oral method, fathered by Samuel Heinicke (1729-1790). The former was open to all who desired to know as to manner of teaching, while the latter was guarded as a secret. About the same time that de l'Epee and Heinicke were beginning their work, Thomas Braidwood (1715-1806) opened a school in Edinburgh, Scotland, and his methods were similar to those of Heinicke, wherein speech was required. His work was also guarded as a secret.

THE WORK IN THE UNITED STATES.

The first permanent school for the deaf in this country was established at Hartford, Conn., by Dr. Thomas Hopkins Gallaudet in 1817, his method of teaching following that of de l'Epee, the French or sign method. This action was followed by the establishment of state schools for the deaf in New York (1818), Philadelphia (1820), Kentucky (1823), Ohio (1829), Virginia (1839), and in Indiana (1844). Other schools were established from time to time, until today there are 132 schools for the deaf in the United States—58 public state schools, 57 public day-schools, and 17 denominational and private schools. These schools number 12,344 pupils, with 1,525 teachers, and millions of dollars are invested in their property. Since the beginning in 1817 the number of pupils instructed is 53,028.

THE WORK IN INDIANA.

In 1830 there were in the state 114 deaf-mutes. In 1840 the number had increased to 312; and still no provision had been made to educate them. In 1841, James McLean, a reputed graduate of the New York school for the deaf, appeared in Parke County, opened a small school for deaf-mutes, but soon gave up the work.

FIRST LEGISLATIVE ACTION.

Later, on February 11, 1842, William Bales, a member of the General Assembly from Vermillion County, offered the following preamble and resolution, which was adopted:

"Whereas, It has been represented to this General Assembly that James McLean is a deaf-mute school teacher and as such has been teaching deaf and dumb orphans and indigent children of Indiana for fifteen months past without any adequate compensation;

"And, whereas, It has been further represented to us that the said McLean is poor, and believing as we do that due encouragement should be given to such laudable efforts to ameliorate the condition as far as possible of this unfortunate portion of our people, and that efforts of that kind on the part of a deaf and dumb citizen of Indiana should not be received as a gratuity by the state;

"Be it resolved, by the General Assembly of Indiana, That the Treasurer of State be and is hereby authorized to pay to said McLean the sum of \$200 out of any money in the treasury not otherwise appropriated as compensation for services rendered as aforesaid."

Mr. Bales at this time had a daughter in attendance at the Ohio school for the deaf, and his preamble and resolution was the first formal acknowledgment of obligation of the State of Indiana to provide means for the education of the deaf.

At the next session of the General Assembly in 1843, a law was passed laying a tax of two mills on each one hundred dollars' worth of property for maintaining a school for the deaf. A bill was introduced by Mr. Bales, February 4, 1843, "to support a deaf and dumb asylum." This was the first direct tax levy ever made anywhere for a school for the deaf.

This tax was increased from time to time until in 1852 it yielded an income of nearly \$40,000 per year. When the state constitution was adopted in 1851, the tax was discontinued and the support of the institution was made a direct charge upon the state treasury, where it remains today.

WILLIAM WILLARD—DEAF-MUTE.

About this time Mr. William Willard, a deaf-mute gentleman from Ohio, bearing the highest testimonials, came to Indianapolis, and after consultation with leading citizens, a meeting was called on May 30, 1843, at which were passed a number of resolutions, among them this:

"Resolved, That we approve of Mr. Willard's proposed visit to different parts of the State for the purpose of communicating with deaf-mutes and their friends in relation to their instruction in this State; and that we recommend that he should, after such a visit, commence a school for deaf-mutes on a small scale at Indianapolis preparatory to such further action of the legislature and other encouragement as may be given for the establishment of an asylum; and that in such visit we cordially recommend Mr. Willard to the kind attention and hospitality of the citizens of Indiana."

THE FIRST SCHOOL.

In October, 1843, Mr. Willard opened his semi-public school with twelve scholars in attendance, who, while paying for boarding, paid nothing for instruction. This school was located on the north side of Washington street, almost midway between Illinois street and Capitol avenue.

INCORPORATION AS STATE SCHOOL.

The General Assembly convening the following December felt itself in duty bound to take charge of and defray the expense on behalf of the State of the semi-public school now under way. On January 15, 1844, an act entitled, "An Act to establish an Asylum for the education of deaf and dumb persons in the State of Indiana," was approved by the Governor and became law. The first section of this act read as follows:

"Be it enacted by the General Assembly of Indiana, That the Governor of the State (James Whitcomb); Treasurer (Royal Mayhew); and Secretary of State (William Sheets), Henry Ward Beecher, Phineas D. Gurley, Love H. Jameson, Livingston Dunlop, and James Morrison of the County of Marion, and Matthew Simpson (Bishop), of the County of Putnam, and their successors, be and are hereby constituted a body politic and corporate, to be known by the style of the 'Trustees of Indiana Asylum for educating the deaf and dumb,' and by such corporate name and style sue and be sued, plead and be impleaded in any Courts in this State."

The board of trustees was directed to lease or rent a proper location in Indianapolis for the establishment of the school and to make all other necessary arrangements for carrying out the provisions of the law as seemed to them just and reasonable. They were to require parents and guardians in all cases to pay the expenses of boarding, clothing and tuition where there was ability to pay. Otherwise, the trustees were to

defray such expenses. Where there was inability to pay, the parents were required to file a certificate of poverty. This was degrading and in a short time the law was changed and everything made free for all those too deaf to be educated in the common schools. And in this liberality, Indiana has the proud distinction of having been the first State in the United States to throw open her educational doors to the deaf absolutely without cost to them.

SECOND STATE INSTITUTION IN INDIANA.

Under the above incorporating law, the trustees proceeded at once to organize and take over Mr. Willard's semi-public school as a State institution. This was the second State institution of any kind to be established in the State of Indiana, the first having been Indiana University in 1822. It is to be noted that the first two institutions of any kind established by the State were for the purpose of education, the one for the hearing, the other for the deaf.

THE SECOND SCHOOL.

The first session began October 1, 1844, in rented quarters, at the south-east corner of Illinois and Maryland streets, with sixteen pupils in attendance, coming from the following named counties: Bartholomew, 2; Henry, 1; Carroll 1; Marion, 2; Clark, 2; Monroe, 1; Dearborn, 1; Randolph, 1; Fayette, 1; Tippecanoe, 3; Vermillion, 1.

The school remained in its first quarters until October 1, 1846, when the number of pupils pressing for admission became so great that steps were taken to procure larger and more commodious quarters.

THE THIRD SCHOOL.

On October 1, 1846, the school was opened in a large three-story building of imposing appearance, upon the south side of Washington street, midway between Pennsylvania and Delaware streets. About this time a warm contest sprang up between various parts of the State as to who should have the permanent location of the institution, the rivalry principally being between Indianapolis and Bloomington, the seat of the State University, the latter place offering land, a cash bonus, and one cent upon each one hundred dollars' worth of property within the county. Indianapolis was finally chosen and grounds east of the city (122 acres) purchased and buildings erected—our present location.

THE FOURTH SCHOOL.

On October 2, 1850, the seventh annual session of the school began in the new quarters, 141 pupils being in attendance.

SIXTY-THREE YEARS' ATTENDANCE.

It is to be noted that during the sixty-three years since its incorporation as a State institution, there have been enrolled 2,507 pupils (1,434 boys, 1,073 girls), every county in the State having been represented. At the present time eighty-two of the ninety-two counties are represented in

the school. During all these years there have been but six superintendents—since 1853, but four. Of the six superintendents, the only one of Indiana birth is the present incumbent, who has served the institution twenty-four years, five as secretary and nineteen as superintendent. During the continuance of the school there have been fifty-two trustees, all now dead save twelve. A perusal of these names by one versed in the history of the State show them to have been men of high character, well known in professional and business life and always actively engaged in furthering the welfare of the State and prominently identified with its history.

“Onward its course the present keeps,
Onward the constant current sweeps,
Till life is done;
And did we judge of time aright,
The past and future in their flight
Would be as one.”

A SCHOOL—NOT AN ASYLUM.

Although established and referred to as an “asylum for the deaf and dumb,” following the nomenclature of the day and without adequate conception upon the part of the founders of its educational scope and further development, it is in no sense an asylum for the deaf nor a place of refuge for those who can not talk—neither is it a prison, a reform school, an almshouse, a children’s home nor a hospital. It is strictly an educational institution—a school in its widest and best sense, and should be in law what it is in fact, a part of the common school system of the State, under the advisory supervision of the Superintendent of Public Instruction, wherein all children of the State too deaf to be properly educated in the public schools may receive an education as a matter of right, not as a matter of charity.

CLASS OF PUPILS ATTENDING.

The boys and girls sent to the school are not deficient in mind (imbeciles or feeble-minded), will (paupers) or emotion (criminals or with criminal instincts), and should not be placed in the general class of so-called “defectives.” They are here for the purpose of receiving an education such as is given to their hearing-speaking brothers and sisters in the public school. In fact, it is the duty of the state to provide for the deaf in those same public schools, but because of economical reasons, and for their more thorough instruction, they are gathered together in a central institution. The expenditures by the state for boarding, and in a very few cases for clothing, are not recompense to parents for the forced separation from their children, and the consequent loss of their natural services, during nine months each year for a term of years. They resent the idea of themselves and their children being referred to as recipients of charity, and their sons and daughters as “defectives.”

NOT A CHARITY.

With this view of the matter, Governor Hanly, in his executive message to the General Assembly of 1907, referring to the building of our new school, said: "But the institution for the instruction of the deaf is not a charitable institution. It is an educational institution and should be built upon a plan in keeping with its purposes." Following this, the General Assembly itself enacted a law changing the name of the institution from the Indiana Institution for the Education of the Deaf and Dumb to The Indiana State School for the Deaf, and specifically stating that "said school for the deaf * * * should not be regarded nor classed as a benevolent or charitable institution, but as an educational institution of the state, conducted wholly as such."

This was in emphasis of the resolutions bearing upon the subject passed by the convention of American Instructors of the Deaf at Morgantown, North Carolina, July, 1905.

MANAGEMENT.

Pupils visit at home for a day or so frequently during the school year at the request of parents, many go home each fortnight for Saturday and Sunday, and many visit friends in the city. Some are day scholars only. They attend lectures, churches, theaters, visit the public buildings and business houses of the city, become familiar with business life, and are more self-contained because of these facts. The boys go without supervision and where they will at certain times, and no act of theirs has ever shown this to be a mistaken policy.

Neither prison or reform school methods, nor "home," or asylum restrictions, obtain in their management. With literary, dramatic and other societies, and with athletic associations, they constitute a genuine student-body and assist in governing themselves. They mingle with the hearing-speaking world in business and social ways, and in athletic contests visit high schools and colleges of the state.

INDUSTRIAL TRAINING.

They are trained to become self-supporting in greater or less degree after leaving the institution by being required to become proficient in some useful trade or occupation, or in the underlying principles of several trades, while in attendance.

Among those who have gone out will be found scores engaged as bakers, cooks, carpenters, cabinet makers, house painters, brick makers, wood and iron workers, tinsmiths, tailors, barbers, etc. We also find many of the deaf in such callings as that of teacher, minister, editor, banker, abstractor, merchant, clerk, undertaker, photographer, artist, bookkeeper, engineer, commercial traveler, grain dealer, draughtsman and florist. Among the deaf at large are to be found lawyers, architects, painters, sculptors, botanists, assayers, chemists, real estate dealers, engravers, postmasters, postoffice clerks, authors, manufacturers, lumber-mill owners, plumbers, government employes, nurses, dressmakers, milliners, etc.—and a few ball players of national reputation! The scope of occupation for

the girls is not so large as that for the boys, but they receive, while in school, thorough instruction in plain and fancy sewing, dressmaking, ironing, cooking, painting, pastel and other art work, and a knowledge of woman's household duties, all of which is applied after their school days.

DEAFNESS AND MUTENESS.

All students attending the school are not totally deaf, neither are all of them dumb (mute). Many are only partially deaf, and quite a number have speech in some degree, yet all are too deaf to receive proper instruction in the schools for hearing-speaking youth, with their large classes and general work. They have tried the public schools, failed to receive proper benefit therein, and have been advised by their teachers to apply here for admission.

Deafness and muteness are not two separate physical defects, but stand together as cause and effect. Muteness is the natural result of deafness. The causes of deafness are legion. A minority only of the deaf are born so, the great majority of them suffering the affliction through the exanthematous and other diseases of childhood. And no family with children is exempt from the ravages of such diseases, whatever its environment!

THE HARD-OF-HEARING AND OTHERS.

I am convinced that a uniform and thorough examination of our public school children throughout the state would disclose an alarmingly large proportion of pupils who lack the proper perception of speech-sound, who are practically deaf to certain elementary sounds, and to whom ordinarily modulated speech must seem in consequence a confused jumble or unintelligible mumbling. In numerous examinations made the number thus afflicted has ranged from 2 to 30 per cent. of the whole examined; and the sad part of it all is that in the great majority of the cases the defect was unknown to pupil, teacher and parent—hence the large number of so-called "stupids" and backward children who blunder along with no material progress. Many of this class should be in this school, and this is one of the objects we have had in view in planning the new institution. It is not intended that this shall be a school for only the totally deaf and dumb, but a school for all those too deaf to receive proper education in the hearing-speaking schools. Another class for whom provision should be made are those who can hear but cannot, at least do not, talk. These have always been denied admission here because of lack of provision for training them. In many of the cases the absence of articulation is due to feeble-mindedness, and with such of course we would have nothing to do—there is another place provided for them and there they should go. But there have been several of such cases presented to me for admission who apparently are not feeble-minded, and we hope to be able in the future to receive them in a special class under a special teacher, their mentality warranting the effort. With these classes in view, I can easily foresee the time within the next few years when our enrollment will be

between five and six hundred. Indiana very properly boasts of its educational facilities, but these will not be complete until provision is made for the classes above referred to, and which we contemplate doing in this school.

CHANGE AND PROGRESS.

Progress is the order of the day, change is written upon the face of things, and the educational movement, whether in general or special form, is no exception. And nowhere is change and progress more to be desired than in our own special work, which, instead of being separated and isolated from the general movement, should be brought into closer relation therewith and made subject to some of its requirements.

The old asylum or institutional home idea is a thing of the past; the old air of mystery and secrecy surrounding the deaf and their schools is rapidly disappearing, and generally, movement is making over to and along the line of modern pedagogics which will give us our proper places as schools, a part of the educational system of the country; and relieving us of old-time, undeserved and ill-fitting association and constant comparison with eleemosynary, charitable, correctional and penal institutions. He is indeed a short-sighted one who, wishing to cross over from the old to the new, emulates Horace's storied rustic and stands upon the bank of the educational stream until it shall cease to flow.

PRESENT CONDITION OF THE DEAF.

Never before in the history of the world, whatever the point of view, have the deaf occupied the high vantage ground they do today; never were they so near the normal status in every way of their more fortunate hearing brother and so free of the prejudice of the ignorant and unthinking; never were they so certain of their rights and never have these rights been so fully acknowledged and so freely given; and nowhere are those rights so fully recognized as in this American republic—rights to life, liberty, and the pursuit of happiness; rights to education and employment; rights before the law and in the church—rights, in short, that no one may discriminate against with impunity. Freed of that depressing spirit of tutelage which for ages influenced their lives and actions, they respond to the call of the higher life, the equal of their hearing brother with equal opportunity, and assume the duties and obligations of honest, honorable, self-supporting and intelligent citizenship; and their capabilities are made evident by successful attainments in widely varied fields of labor.

And in this marvelous advancement Indiana stands to the front with her wise and just and liberal laws of general nature, and with specific enactments making way for still greater advancement for the Indiana State School for the Deaf.

“Long live the good school, giving out year by year
Recruits to true manhood and womanhood dear;
Brave boys, modest maidens, in beauty sent forth,
The living epistles and proof of its worth.

“In and out let the young life as steadily flow
As in broad Narragansett the tides come and go;
And its sons and its daughters, in prairie and town,
Remember its honor and guard its renown.”

*THE DREAM AND THE DEED.

BY OLIVE SANXAY.

Who laid the ancient quarries deep in the wild,
 Out of whose heart the searching hand of toil
 Chiselled the rock to build for the silent child
 Towers of learning here on a ransomed soil?

The Master-Builder! He, whom Solomon prayed
 For wisdom—the single and precious corner-stone
 In the temple of life. This heritage was made
 Gift to the Master's children and our own.

Who dreamed the ancient dream of the love of man
 For the least of the little ones? They whose dreams abide
 Conspire with God to build by the Master-plan
 The sacred soul of youth and the nation's pride.

Builders in stone, ye may not build to the sky;
 'Tis yours to lay foundations strong and true.
 Builders of souls, build to the stars! build high!
 Your children's children shall rise up and honor you.

The walls of the wise lift upward stone by stone
 After the head of the corner lieth sure,
 And step by step the soul climbs up to its own
 By the path of the dream divine—the vision pure.

Of them who dreamed and wrought, of the work and the dream,
 This stone shall witness through all the years to come;
 This stone shall cry from the wall, and the faithful beam
 Out of the timber shall answer,—when we are dumb.*

*AN INVOCATION.

BY FRANCES GOODE.

Dear Father, bless this house of Thine—
 From turret to foundation stone
 May all within it be thine own,
 And in its walls may love divine
 Our steps in wisdom guide;
 That, walking daily near Thy side,
 We may like Christ, our Master, grow,
 And in our hearts a light may shine
 That year by year shall clearer glow.
 May Ignorance and Sin take flight—
 Twin giants from the realm of Night.

*See Laying of Corner-Stone, page 23.

ADDRESS TO GRADUATING CLASS.

BY HON. J. FRANK HANLY, Governor of Indiana, June 12, 1907.

Mr. Superintendent, Gentlemen of the Board of Trustees, Teachers, and Students and Friends of the Indiana State School for the Deaf:

I congratulate you, one and all, upon this splendid occasion. Most of all, I congratulate these eighteen young men and women who are the central figures in these ceremonies. It indeed marks an epoch in your lives. Your minds run back over the years you have spent within these walls; years of faithful, earnest effort; years of sacrifice; years of groping for things you did not know; years of aspiration; years of uplifting; years of hope. And now we have the fruition; the consummation of it all.

How much it must mean to you! What a world has been opened to you! For some reason, somehow, it has not been yours to hear and speak. These faculties have been denied you, and yet a way has been found to unlock to you the treasure house of all the years ago. The state has found a way to open to you what had been and would now be mystery but for the way it has found. It has found a way to speak to you. It has found a way to lay before you the story of the great men and great deeds of the past. It has found a way to lay before you the hope that springs from the knowledge of what the past has been; of what the present is; of what the future may be. How much that must mean to you? You cannot hear the music of the morning. You cannot hear the rustle of the wind among the trees. You cannot hear and respond, as others do, to the music of the human voice. But, aye, you can hear, in unuttered speech, the glories of God's world all about you after all. You can see the beauty of the sunrise; the splendor of the day; the glory of the sunset; the sapphire of the evening sky; the stars in the serene and vast distance. You can see the majesty of the sea, the greatness of the mountains; the towering trees, and then, through what the state has done for you, you can know and understand the thought of those who have used God's great world greatly in the years gone by.

I can understand, boys and girls, how an education is of exceptional value to any boy, to any girl—those who are normal and possess all their faculties. I have some estimate of its value, some notion of what it is worth to them. But it seems to me that it is worth infinitely more to you, for it unlocks doors that would be closed but for it and closed forever. Eighteen young men and women finishing school work today are to go back to their homes equipped for life's battle; able to make their way; to become self-supporting citizens of the commonwealth. What a splendid thing it is! I have been reading a little of the story of what you have been doing here. I see that these young men, Mr. Superintendent, know how to do things. They have practical knowledge. Some of them are printers; some of them are shoemakers. I see how these young ladies have been taught to do things. They know how to do housework; they

know how to do plain and fancy sewing; they know something of the arts. They have learned how to go out into the world, take their places and do a woman's share. I find eight of the congressional districts of the state represented by these graduates—a remarkable thing. It shows how state-wide the benefit is; how state-wide the influence is.

You know we pride ourselves upon the fact that every boy and girl, every normal boy and girl, born in this goodly commonwealth, gets as a birthright, by reason of his birth under Indiana skies and upon Indiana soil, the privilege of at least a common school education, including the high school if he so desires. That is his birthright. It belongs to him, not as a charity, not as a thing to be given by the state as a gratuity, but a thing he has a right to claim, a thing he has a right to demand of the state. He has a right to say to the state, "you must give me an equal chance in life's battle, and to do that you must give me an education." We all recognize that; we pride ourselves upon it. That is right; it is just. I am glad it is so. But I want to say to the people of the State of Indiana, and I wish they could all hear it, that if that is the right of the normal boy and girl, the boy and girl who possesses all the faculties of the mind, all the faculties of nature, if that is his birthright, if he may justly claim that of the state, not as a gratuity, not as charity, but as his by virtue of his birth upon our soil and under our skies, how much greater your right to demand of the same state the same education and the same opportunities. The fact that some of the faculties that he possesses are denied to you does but emphasize the state's obligation to you, the state's duty, in so far as it can, to make up to you what has been denied you by nature.

I am glad, I am profoundly glad, that we are getting away in Indiana from the thought that the school for the education of the deaf and the school for education of the blind are charitable institutions. It has been my privilege to do what I could to instill that thought into the minds of our people. I hope it may reach a conviction in Indiana. I want to say again, that all may hear, that this is not a charitable institution. It is an educational institution. It is the state's effort to do its duty by you as it is doing its duty by the normal boy and girl. To me it is an incomprehensible thing that the state should give to a child possessing all the natural faculties the opportunity of a common school and a high school education and deny the privilege to another child who lacks some of these faculties, who is unable to hear, who is unable to speak—deny to him an equal opportunity, and to say to him: whatever we do for you is gratuity, a charity, and not a matter of right that you may ask. It is incomprehensible to me. It is not right, and the people for years have made a great mistake in this behalf. We are getting away from it in Indiana. This today is an educational institution, and, hear me, it is going to be a greater one tomorrow.

We propose to build for you an institution that will compare with the best educational institutions for the normal boys and girls of Indiana. We are not doing it as a charity; we are doing it as your right, in answer to your due, to fulfill our obligation that we owe you. We are going to make it commensurate with your needs. We are going to build it, not for a day, not for a year, but for a century. We are going to make

it the one institution in Indiana to which those who are now here may return again and again on occasions like this for new inspiration, for new hope in life, building it so that from its doors and walls may go young men and women to take their places in the battle of life, to add to the glory, the wealth, the power and the influence and the fame of this goodly commonwealth.

There has been some criticism because of the cost and the expense that is being incurred. I wish the harping critics were here this morning. I wish they could stand with me and look into your faces and tell me, if they can, how much what has been done for you is worth to the state. If I could confront them with you, with what you stand for, with what you may be, aye, with what you are going to be, and ask them to put a measure of value upon the life of one of you, I would cover them with shame and send them from this hall silenced, because of what they would have seen and the solemnity of the responsibility that rests upon them.

We are so rich; we are so amply able to meet the obligation we owe you; we have such wide opportunity to serve the state and ourselves for years to come that it would be parsimony, aye, it would be cowardice, it would be lack of courage to do that which is plainly our obligation, clearly our duty, if we were to abandon what we have set our hands to do; and I am here to say to you that we do not intend to abandon it! We intend to build the institution as it was conceived and as it was planned. It may not be done this year. It may not be done under present appropriations, but we will do it other years and under other appropriations. A battle is never lost because of one reverse. The state, measurably, has answered generously the appeal that has been made. It is going to answer it more generously. I hope to have the privilege in the near future of standing in that newer and better chapel beyond the fair grounds where all the students and all their friends may find convenient accommodation on a day like this, to stand amid the buildings that represent the consummation of our effort and our thought, that represent a completed institution, well equipped, well officered, for the education of the boys and girls in Indiana who lack the faculty of hearing and of speech. I count that one of the pleasures yet to be. I have no thought that it will not be. I have, on the other hand, an insistent thought that it shall be. We are right, and those who are right may well trust to the sober second thought of a generous, splendid people for their vindication. And I want to say to this Board of Trustees, I want to say to the Superintendent of this institution, be not cast down, be not faint-hearted; this work of yours will outlast the caviling criticism of the hour. In the years that are to come it will stand as a monument to your courage, to your faith, to your stalwart effort, greater and better than any other that can be builded. Every boy and girl that will come from its portals will be a monument to your faith, to your hope and to your courage, and to the continuity of your purpose, that knew no fear, that knew no faltering. When we have finished it is to be the best equipped institution for the education of the deaf in all this wide country. For the last fifteen years Indiana has been rapidly forging to the front in educational and all institutional policies. Other states are coming to learn of us. Is not that worth something? Is not there something of pride and satisfaction in that condition? And when this insti-

tution is completed, and when it is equipped, and when the boys and girls of Indiana are assembled there in years to come, other states will send commissions to Indiana to learn how to build and establish a completed institution for the education of the deaf. Let it go into the record. Let it stand as prophecy now; it will be history tomorrow. Some things a man may safely prophesy, and this is one of them. And so I congratulate you this morning; I congratulate the superintendent, the board of trustees and your friends. This is a splendid day. Aye, what a day of worth it is. How great the reward of those who learn to do a thing better than any one else can do it. I notice one of these boys is a printer. Whenever you become the best printer in the State of Indiana you reap your own reward. I notice some of these girls have taken up this or that occupation. No matter what it is, so it be a useful one, when you have learned to do it better than any one else about you can do it, you may claim your own reward. And the credit of serving well is as great, no matter what the sphere. Did he do his duty? Did he meet his obligation? Did she measure up to her environment and responsibility? Has she had courage sufficient to meet the trials and obligations of the hour? These are questions which if answered in the affirmative settle for all time the meed of praise, the merit and the reward that will come to you.

I do not know how many young men and women have graduated from this institution. I am not able to give the exact number. They are many. Do you know what I want you to do? Whenever you find one of them, I want you to say to him: "Become today and from this hour a missionary for the Indiana State School for the Deaf. Go tell the story of what it is and what it means to your neighbors and friends. Spread this gospel of the service that is being rendered to you among the people of the State of Indiana." Why do I say that? Because it will be the most intelligent argument that can be made for the support of this institution, for the completion and equipment of the institution over yonder that means so much to you and the people of the state. I want that they should know, that they should understand what is being done. I want that they may count the cost, if they will, on the one hand and that they may know and realize what is being purchased by it and with it on the other hand. And when the people know that, we know what the result will be; we know what the choice will be. They will make no mistake.

I have talked to you somewhat about temporal and practical things. These are of value. I would not have you ignore them. But I cannot let this opportunity go by, I cannot go away from here, young men and young women, conscious that you are going out into the world tomorrow to fight life's battle, without saying a word of encouragement to you along other lines. I can put the words very briefly. Character! Character is worth all the rest. It will count for more than anything else. Character, integrity of purpose, cleanliness of life, the greatness of your aspirations, moral fiber—these are the things that will be worth most to you. I cannot tell you their value. No man can measure them, because they are immeasurable. Riches some of you may have today, but tomorrow you may not have them. Influential friends some of you may have today, but tomorrow you may not have them.

It may be yours tomorrow to stand alone, but if you possess character,

the qualities of heart and mind necessary to make manly, womanly character, other friends will come, riches can be obtained, the confidence of your associates will be assured, and after all success will be yours. I sometimes think the worst misfortune that can happen or befall a boy or girl is to be the pampered child of wealth, sent out into the world with unlimited means at their command and without the moral fiber that makes character. What a misfortune that is! How pitiful it is! The daily press tells the story of such lives; they must needs fail. Wealth misused is the greatest curse that can befall a people or an individual. Ability to know how to use it, willingness to use it aright, makes wealth a blessing. I suppose some of you boys and girls are not rich; I suppose some of your parents are not rich. In a sense that is true, but in a greater sense, in a wider sense, you are immeasurably rich. You go from here with thought developed, with life developed, with character built. That is of such value as to make you immeasurably rich. Go out into the world and use it. Go out into the world and do something of service for your fellows, for those about you, for the state in which you live, remembering always that deeper than the affection of man, greater than the strength of the commonwealth, is the love of the Father, the Great Father, for His children, and if you are one of His children, when the troubles come, when the waves are high, when your heart is sad, remember that to Him you may always go, that He always hears, that faith in Him, in His promise, courage to do His will, after all, bring the greatest happiness, the surest peace to all men and all women.

I thank you and congratulate you again. I hope in the years to come to meet you in the new institution. Come back next year. It will be good for you. Come back the next year, and the next year. Come back when the silver creeps into your hair. Come back when your step halts. Renew your youth within the walls of the new institution. Your friends will be glad to see you. May each of you be a monument to the courage, fidelity and faith of the men and women who have builded so wisely, so generously and so greatly. I thank you.

RESOLUTIONS.

NATIONAL ASSOCIATION OF THE DEAF.

Norfolk, Virginia, July 4-6, 1907.

WHEREAS, The privilege of an education is the birthright of every American child which the state as its first great duty endeavors impartially to make as complete and perfect as possible, regarding it as the very foundation of the commonwealth; and,

Whereas, The deaf child, deficient in neither mind, nor will, nor emotion, has the same inalienable right to the same education as his more fortunate hearing brother; and,

Whereas, The old "asylum" or institutional "home" idea in connection with the education of the deaf is a thing of the past—the old air of mystery and secrecy surrounding the deaf and their schools rapidly disappearing—and the movement generally making over to and along the line of modern pedagogics, giving schools for the deaf their proper place as a part of the public school system of the country; and,

Whereas, Thirty-eight and one-half per cent. of the deaf over ten years of age, as against fifty per cent. of the hearing-speaking of the same age, are gainfully employed, entering into nearly every occupation pursued by the people of the United States (forty-three per cent. of the deaf if over twenty years of age); and eighty-one per cent. gainfully employed of those who have had schooling, thus indicating the value of education; and, further, that the deaf well perform their part as self-supporting citizens, a large proportion of whom are heads of families and possessors of homes; and,

Whereas, Every action and influence in contravention of this very great and highly desirable advance should be severely condemned by the deaf and their friends; therefore, be it

RESOLVED, by the delegates of the Eighth Convention of the National Association of the Deaf, assembled at Norfolk, Va., July 4-6, 1907:

First—That education of the deaf on the part of the state is simply fulfillment of its duty as a matter of right and justice, not of sympathetic charity and benevolence to the deaf.

Second—That schools for the deaf should not be known and regarded, nor classified, as benevolent or charitable institutions. On the contrary, they should be known and regarded, and classified, as strictly educational institutions, a part of the common school system of the state under the advisory supervision of the regularly constituted school authorities, instead of being supervised by boards of charity, legislative benevolent committees and the like, which tends to foster a spirit of dependence in the pupils and marks them as objects of charity, wards of the state, etc., which they are not any more so than are children with hearing who attend the public schools.

Third—That we enter our vigorous protest against the constant association and comparison in convention assemblies of whatever nature, and in published reports, etc., of deaf children with the feeble-minded, the epileptic, the insane, the incorrigible, the physically deformed and diseased, with inmates of penal institutions and others of like classes, generally referred to as “defectives,” a term which we resent as opprobrious when applied to the deaf, used as it commonly is to designate mental, moral and physical degeneracy.

Fourth—That for the furtherance of more complete emancipation from the thralldom of the past, with its ill-conceived and false notions concerning those who cannot hear, or hear but imperfectly, we recommend the appointment of a committee of five to work for its attainment, and earnestly urge agitation of the matter upon the part of every member of the convention.

THE NEW LAW GOVERNING STATE INSTITUTIONS.

An act concerning the names, management and control of the state benevolent, reformatory and penal institutions, defining the powers of the boards of trustees, prohibiting campaign assessments, providing penalties and repealing all laws and parts of laws in conflict therewith.

(H. 329. Approved March 2, 1907.)

STATE INSTITUTIONS—BOARDS OF TRUSTEES.

Section 1. Be it enacted by the general assembly of the State of Indiana, That the board of trustees of the central hospital for insane, the northern hospital for insane, the eastern hospital for insane, the southern hospital for insane, the southeastern hospital for insane, the Indiana village for epileptics, the Indiana soldiers' and sailors' orphans' home, the Indiana institution for the education of the deaf and dumb, the Indiana institution for the education of the blind, the Indiana school for feeble-minded youth, the Indiana boys' school, the board of control of the Indiana state prison, the Indiana industrial school for girls and the Indiana women's prison, shall hereafter consist of four trustees each. One additional trustee shall be appointed by the governor to each of said boards as the same are now constituted, within thirty days from the taking effect of this act, and each of such additional trustees so appointed shall serve for a term of four years. The board of managers of the Indiana reformatory shall continue to consist of four members, as now constituted, and after the first expiration of term of office which shall occur in the board of trustees of the Indiana state soldiers' home, said board shall consist thereafter of four members only. Upon the expiration of the term of any member of any of said boards, or upon a vacancy occurring in any of said boards, the governor shall appoint a successor to such member, except as herein otherwise provided. All appointments shall be for a term of four years respectively, excepting in case of vacancy by death, removal or resignation they shall be for the unexpired term. In making all appointments referred to in this section, the governor in addition to the qualifications hereinafter mentioned, shall take into consideration the political affiliation and belief of such appointees, so that not more than two of the members of said boards respectively shall be members of the same political party or have the same political affiliation or belief. The names of said board of control of the Indiana state prison, the board of managers of the Indiana reformatory, the Indiana industrial school for girls and the Indiana women's prison shall each be known hereafter as the board of trustees of said institutions respectively: Provided, That this act shall not be construed as abolishing any of the present governing boards of said institutions, but the present members of all of said boards shall serve out their respective terms thereon, under the appointments already made.

NAMES OF INSTITUTIONS CHANGED.

Sec. 2. The name of the Indiana industrial school for girls is hereby changed to the Indiana girls' school; the name of the Indiana institution for the education of the deaf and dumb is hereby changed to the Indiana state school for the deaf; the name of the Indiana institution for the education of the blind is hereby changed to the Indiana school for the blind; and said schools for the deaf and for the blind shall not be regarded nor classed as benevolent or charitable institutions, but as educational institutions of the state conducted wholly as such.

INDIANA STATE PRISON.

Sec. 3. The board of trustees of the Indiana state prison shall be ex officio the board of parole for such prison. The board of trustees of the southeastern hospital for the insane shall be appointed when the said hospital is completed.

TRUSTEES—QUALIFICATIONS—BOND—REMOVAL.

Sec. 4. All the members of the board of trustees of the Indiana state soldiers' home hereafter appointed shall be honorably discharged soldiers or sailors of the civil war of the United States; and no person shall hereafter be appointed a member of the board of trustees of the Indiana soldiers' and sailors' orphans' home who is not an honorably discharged soldier or sailor of the civil war of the United States, or the wife or widow of the same. The board of trustees of the Indiana women's prison and of the Indiana girls' school shall consist of women only, and one member of the board of trustees of the Indiana school for feeble-minded youth and the Indiana soldiers' and sailors' orphans' home may be a woman. No other qualifications, except fitness, and those hereinbefore specified shall be considered in the making of such appointments. Each member of any such board of trustees hereafter appointed shall qualify by giving a bond with surety in the sum of ten thousand dollars to the approval of the Governor. At the meeting of said boards following the appointments provided for in section one (1) of this act, they shall proceed to elect a president, vice-president, treasurer and secretary, and thereafter annually the organization shall be at the April meeting of each of said boards. Such treasurer shall qualify by executing a bond in the sum of fifty thousand dollars, with surety to the approval of the governor. The governor may remove any of such trustees for misconduct or neglect of duty, after an opportunity to be heard upon written charges. The board of trustees of any institution shall have the right to condemn property for the convenience or the necessary purposes of such institution. Condemnation proceeding(s) shall be conducted pursuant to the statutes relating to the exercise of the power of eminent domain.

COMPENSATION—INTEREST IN CONTRACTS.

Sec. 5. Such trustees shall receive as compensation three hundred dollars (\$300.00) a year each and their reasonable expenses, not to exceed one hundred and twenty-five dollars (\$125.00) a year each, which shall be paid quarterly as other expenses of the institutions are paid. No person shall be eligible to be appointed a member of any of the boards of

trustees referred to in this act who is a contractor with the institution of whose board he or she is a member, or who is interested either directly or indirectly in any contract with or in furnishing any of the supplies for such institution, and if any person appointed under the provisions of this act shall become so interested during his or her term of office, such interest shall vacate his or her office, and his or her successor shall immediately be appointed as hereinbefore provided, to fill his or her unexpired term.

CUSTODY—EMPLOYES—CAMPAIGN CONTRIBUTIONS.

Sec. 6. Such boards shall have the legal custody and supervision of their respective institutions. Three members of a board shall constitute a quorum for the organization of the board and for the transaction of all business. The trustees shall give so much of their time and attention to the affairs of their respective institutions as shall insure the wise, efficient and faithful management thereof. Each board shall appoint a superintendent or head of the particular institution, when there is a vacancy, to be known by the same name as that now applied to such officer in each of the respective institutions mentioned in this act and such board shall have the power to remove him or her for any cause impairing faithful, efficient or intelligent administration of the office, after opportunity is given him or her to be heard upon written charges. The superintendent of the Indiana girls' school and of the Indiana women's prison shall be women; the superintendent of any hospital for the insane and of the Indiana village for epileptics shall be a reputable physician. No person shall be appointed superintendent of a hospital for the insane unless he has had professional experience in an institution for the insane, and no person shall be appointed superintendent of the Indiana village for epileptics unless he has had professional experience in a similar institution or in an institution for the insane. All other officers and employes of each institution named herein shall be selected and appointed by the superintendent or head of the institution and shall be removable at his or her pleasure, and all of such officers and employes shall be appointed regardless of political or religious affiliation on the basis of fitness, after examination as to their qualifications for the duties to be performed under such rules and regulations as may be prescribed by the board of the institution. The annual compensation of the superintendent or head of the institution, and the number of officers and employes, their duties and compensations, shall be fixed by the board of trustees at its discretion, and said trustees are hereby forbidden to solicit or request or in any way interfere with the appointment or discharge of any officer or employe. It is hereby made a misdemeanor for any person to solicit or receive from any officer or employe of said institutions any money for campaign assessments, or for any officer or employe of said institutions to pay any such assessment, to any person or organizations or political party. Upon conviction such person so soliciting, receiving or paying such assessment shall be fined in any sum not less than fifty dollars (\$50.00) nor more than five hundred dollars (\$500.00), to which may be added imprisonment in the county jail or workhouse for not less than sixty (60) days nor more than one year; and any person so offending who is an officer or employe of an institution named in this

act shall be immediately removed from such position and shall not be eligible for reappointment for a period of five years.

SUPPLIES—PURCHASE—BIDS.

Sec. 7. In the purchase of all supplies that enter into the maintenance of any of the institutions covered by this act, it shall be the duty to invite competitive bids through sealed proposals to the president of the board of each institution, and the lowest and best responsible bidder shall be awarded the contract, and the same provision shall apply to the construction and equipment of all buildings for any such institution. Public notice of such bids shall be given by publication in the two leading newspapers in the county where such institution is located, and otherwise if considered beneficial. If such board deems it advisable and in the interest of economy to buy certain articles in quantity to last for a longer period, it shall have the right to do so. Such fact, however, shall be particularly stated in the notices. Blank bids shall be furnished for all applicants, but bids shall not be rejected because not contained on such form. Any or all bids may be rejected.

REPORTS TO GOVERNOR.

Sec. 8. Annual reports, uniform in character, shall be made by such boards to the governor, and shall be printed. Such institutions shall be conducted upon a thorough, nonpartisan basis.

DUTIES, SAME AS HERETOFORE.

Sec. 9. Such boards referred to in section 1 of this act, and the superintendents or heads of the institutions named herein, shall have the same duties as now pertain to the present boards and superintendents or heads of institutions, except as otherwise specified in this act.

REPEAL.

Sec. 10. All laws and parts of laws in conflict herewith are hereby repealed; and all existing laws and parts of laws not in conflict are continued in full force and effect.

* COURSE OF STUDY IN OUTLINE.

PRIMARY GRADES.

Grade 1—

Language—Past, present and future tenses, active voice, with auxiliaries be and have; positive, negative and interrogative; vocabulary, parts of speech and sentence models as prescribed. Arithmetic—Notation 1 to 31, with Arabic and number-words; addition and subtraction to 10, teaching plus and minus signs; mental and written. Penmanship—Instruction with pencil and crayon, followed by pen and ink exercises. Letter Writing. Good Morals and Gentle Manners. Object and Observation Lessons.

Grade 2—

Language—First grade verb forms and sentence models continued, with added auxiliaries; present progressive; present habitual; conjugation; vocabulary, parts of speech and sentence models as prescribed. Arithmetic—Notation 1 to 100, Arabic and number-words; Romans and ordinals to 12; addition and subtraction to 100; mental and written. Penmanship—Copy-book work, Nos. 1 and 2. Drawing—First principles, blackboard, slate and paper; drawing book, No. 1. Letter writing. Good Morals and Gentle Manners. Object and Observation Lessons.

Grade 3—

Language—First and second grade forms and sentence models with auxiliaries continued; infinitive; imperative mode; conjugation; vocabulary, parts of speech and sentence models as prescribed; journal writing. Arithmetic—Notation 1 to 1000; Arabic and number words, Romans and ordinals to 100 and higher; addition and subtraction; dollars and cents; measuring; mental and written. Geography—Introductory work by teacher; positions, cardinal points, locations, plans, etc. Penmanship—Copy-book work, Nos. 3 and 4. Drawing—Drawing books, Nos. 2 and 3. Letter Writing. Good Morals and Gentle Manners. Object and Observation Lessons.

Grade 4—

Language—Previous verb forms and sentence models continued; present perfect tense; passive voice; conjugation; vocabulary, parts of speech and sentence models as prescribed, introducing idioms; journal writing. Arithmetic—Numbers above 1000, with Arabic and number words, Romans and ordinals to correspond; addition and subtraction, multiplication and division, with not more than two figures in multiplier and divisor, teaching multiplication and division signs; aliquot parts; dollars and cents; measuring; buying and selling; mental and written. Geography—Third grade work continued and enlarged, concerning institution, city, county and state, showing principal towns, rivers, lines of railway, high-

*Elaborated in form for primary grades in "Course Limitations," wherein is detailed the monthly development and limitations in language, arithmetic and geography.

lands, lowlands, mineral and agricultural products; map drawing. Penmanship—Copy-book work, Nos. 5 and 6. Drawing—Drawing books, Nos. 4 and 5. Letter Writing. Good Morals and Gentle Manners. Object and Observation Lessons.

***Grade 5—**

Language—Previous verb forms and sentence models continued; past perfect tense; present participle; systematic instruction in idioms; vocabulary, parts of speech and sentence models as prescribed; journal writing. Arithmetic—Practical problems in the four fundamental rules, introducing properties of numbers; weights and measures; United States currency. Geography—First lessons; general division and features of land and water, and form of earth; map drawing. Penmanship—Copy book work, special selection. Drawing—Drawing books, Nos. 6 and 7. Letter Writing. Good Morals and Gentle Manners. Object and Observation Lessons.

INTERMEDIATE GRADES.

B Grade—

Language—General review of primary-grade verb forms and sentence models; future perfect tense; potential and subjunctive modes; past and past perfect participles; systematic instruction in idioms continued; journal writing. Arithmetic—Cancellation; fractions and decimals begun; United States currency; practical problems in money; bills and accounts. Geography—Elementary mathematical, physical and political; map drawing. History—First and second terms, introductory work by teacher, concerning institution, city, county and state; third term, stories of American history. Drawing—Special selection. Good Morals and Gentle Manners. Object and Observation Lessons.

A Grade—

Language—Grammar; idioms and general reading continued; compositions. Arithmetic—Fractions and decimals completed; denominate numbers and measurements; exercises in commercial forms. Geography—World's mathematical and physical; globe and map studies; map drawing. History—Elementary United States.

ACADEMIC GRADES.

Junior Grade—

Language—Grammar; general reading and idioms continued; compositions. Arithmetic—Percentage, practical problems in profit and loss, commission, insurance, taxes, duties, etc.; exercises in commercial forms. Geography—World's political; map drawing. History—Complete United States and stories of.

Middle Grade—

Language—Grammar and general reading; compositions. Arithmetic—Interest; discount; exchange; partnership; ratio and proportion. History—First and second terms, general history; third term, English; selections, and stories of both. Physiology and Anatomy—"Elements of," and lectures, making use of anatomical models, skeleton, etc.

*The future perfect tense, the potential and subjunctive modes, except as introduced under auxiliaries, and the past and past perfect participles are to be taken up in the Intermediate Grades.

Senior Grade—

Language—Grammar and literature; compositions. Arithmetic—Analysis; roots; mensuration; general review. Natural Philosophy—Lectures and experiments. Moral Philosophy—Lectures. Civics—Outline in general, United States in particular. Current Events.

*TEXT-BOOKS USED.

Grade 1—No books; lesson-papers.

Grade 2—No books; lesson-papers.

Grade 3—First Reader (Cyr); lesson-papers.

Grade 4—Stories for Language Study (Kellogg).

Arithmetic (Original Work by Teacher).

MS. Geography (Teacher).

Lesson-papers.

Grade 5—Stories of Great Americans (Eggleston).

Arithmetic (Original Work by Teacher).

First Lessons in Geography (Monteith).

Lesson-papers.

B Grade—First Lessons in Language. Part I (Tarbell).

Stories of American Life and Adventure (Eggleston).

Elementary Arithmetic (Walsh).

Elementary Geography (Frye).

MS. History (Teacher).

First Book of American History (Eggleston).

A Grade—First Lessons in Language, Part I (Tarbell).

Book of Tales (Edited by Swinton).

Complete Arithmetic (Walsh).

Complete Geography (Frye).

Elementary History of the United States (Quackenbos).

Junior Grade—First Lessons in Language, Part II (Tarbell).

Old Stories of the East (Baldwin).

Complete Arithmetic (Walsh).

Complete Geography (Frye).

History of the United States (Higginson).

Middle Grade—Lessons in Language, Part II (Tarbell).

Ten Great Events in History (Johonnot).

Complete Arithmetic (Walsh).

General History (Anderson).

English History (Higginson and Channing).

Physiology, "Our Bodies and How We Live" (Blaisdell).

Senior Grade—Lessons in Language, Part II (Tarbell).

Primer of English and American Literature (Clarke).

Shakespearean Primer (Institution edition).

Complete Arithmetic (Walsh).

Natural Philosophy (Cooley; lectures and experiments).

Moral Philosophy, lectures.

Civics (Townshend's Shorter Course).

*Various other text-books and supplementary readers for reference and general reading are made use of in the different classes.

RULES.

CONCERNING THE ADMISSION AND RETENTION OF PUPILS AND WHAT SHALL BE TAUGHT THEM.

1. This institution is open to all the deaf of the state free of charge, provided they are of suitable age and capacity, and are too deaf to be educated in the common schools.

2. Pupils will be considered of proper school age between the years of eight and twenty-one, but the admission of pupils between the years of seventeen and twenty-one will depend upon circumstances. No child who is idiotic or feeble-minded or who is afflicted with sore eyes, or with a contagious or offensive disease, or who is an invalid so confirmed as to prevent study, or who is in a badly crippled condition and unable to go up and down flights of steps, or who is unable to care for self in a general way, will be received as a pupil.

3. This institution is in no sense an asylum for the deaf, nor a place of refuge for those who can not talk—neither is it a prison, a reform school, an almshouse, a children's home nor an hospital. It is strictly an educational institution—a school in its widest and best sense, and a part of the common school system of the State, wherein the deaf children of the state receive an education as a matter of right, not as a matter of charity.

4. Application for the admission of pupils must be made upon the regular blank form of the institution, which will be furnished the applicant by the superintendent. All questions on said form must be fully answered, and the requirement of certificates of a physician and of a justice of the peace on the back thereof (that the person seeking admission as a pupil is eligible physically and mentally and is a legal resident of the county named), must be complied with. (See Sec. 2999, R. S. 1901.)

5. No child shall be brought to the school as a pupil until the proper application has been filed with, and acted upon, by the superintendent, and due notice of admission sent by him to the applicant.

6. Those for whom applications have been made and favorably acted upon will be admitted as pupils on the following conditions: (a) They must be provided with clothing, and brought to the institution punctually at the time designated by the superintendent, unless detained at home by sickness. (b) They are to remain in school until the second Wednesday in June of each year. (c) No parent or guardian will be allowed to take a pupil out of school during the session without some very urgent reason. (d) Pupils will not be allowed to go home during the holidays, nor at Easter time, the annual session being a continuous one without a vacation.

7. The annual session of school usually begins on Wednesday of the week preceding the first day of October and closes on the second Wednesday in June. Pupils must report promptly at the beginning of the session. No pupil, unless under extraordinary circumstances, will be received at

any time other than at the beginning of the annual session, because of the classes being graded and the work progressive from the first day.

8. The pupils will be sent home to spend the summer vacation on the day following the close of school.

9. The Institution will provide for each pupil regularly admitted, boarding, lodging, washing, superintendence of conduct, manners and physical needs, instruction, school supplies, etc., but will not pay traveling expenses of pupils in coming to or going from the institution, nor supply them with clothing, except under certain conditions mentioned in Paragraph 12.

10. All traveling expenses of pupils to and from the institution must be defrayed by the parents, guardians or friends. They are also required to furnish annually to each pupil sent by them a sufficient quantity of suitable clothing to last until the close of the term. (See Sec. 3000, R. S. 1901.) A good, stout trunk must also be supplied. The name of the pupil must be written in indelible ink upon all articles of clothing, as they are liable to be lost when not so marked. While close and constant attention will be given to the preservation of pupils' clothing the institution disclaims any responsibility for worn-out, lost or misplaced articles.

11. The applicant must deposit with the superintendent, when the pupil is admitted, a sum not less than \$5.00 to defray incidental expenses (shoes, repairs, etc.) for said pupil during the year. If any part of said deposit should remain unexpended at the close of the annual session, it will be returned or carried forward to the next session, as the applicant may desire.

12. When it is established that a pupil is in indigent circumstances, or when the parents, guardians or friends are either unable or neglect to furnish the necessary clothing, or to pay the necessary traveling expenses (going from the institution), then the same will be provided for by the superintendent in pursuance of the following legislative enactment:

Sec. 3001, R. S. 1901. In all cases where suitable clothing, and means for defraying traveling expenses are not otherwise supplied to the pupils, the same shall be provided by the superintendent, who shall make out and file with the treasurer of state accounts therefor, separate in each case, against the respective counties from which the pupils are sent, in an amount not exceeding forty dollars per annum for every such pupil; which accounts shall be severally signed by the superintendent and attested by the seal of the institution under his charge; and the treasurer of state shall charge each account, thus certified, to the county from which the pupil named therein was sent, and credit the amount to the current expense fund of the proper institution.

Sec. 3002, R. S. 1901. The treasurer of state shall forward each account, so filed with him, to the treasurer of the proper county, who shall cause it to be paid out of the county treasury to the treasurer of state; and such county shall, in the name of the county, and by suit, if necessary, collect the amount of such account from the parents or estate of such pupils, as the case may be, where there is ability to pay: Provided, That at least three hundred dollars of the property shall be exempt from the payment of such account.

13. The regular course of study in the institution is so arranged as to

cover ten years, and is divided into primary, intermediate and academic courses. The primary and intermediate courses embrace spelling, reading, writing, drawing, arithmetic, geography, history and grammar. The two courses are divided into seven grades, five primary and two intermediate, and the time required to complete them is seven years. The academic course comprises a three years' course of advanced primary and intermediate work, and of other studies. In addition to the above, a kindergarten department, with two years' instruction, is provided for the younger and selected pupils. The regular kindergarten work for hearing-speaking children is adapted to the needs of the deaf, the second year merging into primary work. The number of years a pupil may remain in school is regulated by a time schedule, and depends upon the mental ability, progress and conduct of the pupil himself. He may remain certainly five years, subject to conditions named in Paragraph 14, and as much longer, up to thirteen years, as his conduct and promotions from year to year may warrant.

14. The superintendent shall have the power at any time to discharge a pupil from the institution for inability to receive an education, for non-progression or non-attendance, for violation of the rules of the institution, or where his retention would prove a detriment to others or to the school. He may also, when he thinks the facts warrant it, extend the period of instruction in individual cases.

15. It is the intention of the trustees to render the pupils self-supporting in greater or less degree after leaving the institution, by requiring them to become proficient in some useful trade or occupation, or in the underlying principles of several trades, while in attendance at the institution. In accordance with this design, all pupils will be required to labor a portion of each day, the girls performing the lighter kinds of housework, cooking, the various kinds of needlework, and dressmaking and millinery in all of their branches; the boys at various trades—type-setting, presswork, carpentry, cabinetmaking, woodturning, painting, glazing, cutting, fitting, making and the repair of shoes, harnessmaking, tin-work, baking, cooking, floriculture, barbering and farming. Pupils will be assigned to one or more of these occupations, or others, as the superintendent may deem them most fitted for. Drawing, freehand and mechanical, will be taught to all pupils during the first five years, and in the four higher grades all girls and selected boys will be taught sketching, designing, modeling, woodcarving and painting in oil, water colors and pastel, etc.

16. In the education of the deaf there are two methods and one system of instruction generally recognized.

The manual or French method (using sign-language, manual alphabet and writing), of which there is a variation that may be called the "Alphabetic," wherein only the manual alphabet and writing are used.

The oral or German method (using speech and speech-reading and writing), of which there is a variation that may be called the "Auricular," wherein special attention is given to the development and training of the hearing, when possessed in any degree, by means of which instruction is partially given.

The Combined system (a so-called combination of the two methods).

Some of the leading German instructors, after long years of experience, favor the French method; some of the French schools have adopted the German method, but no country, other than America, has generally adopted the Combined system, which, in justice, should be called the American system.

The general system of instruction used in this institution is known as the American (combined) system, under which all known methods and their variations may be used for the attainment of an object common to all. Speech and speech-reading are regarded as very important, but mental development, and the acquisition of language and general knowledge, are regarded as still more important. It is believed that with a great many of the new pupils now entering, the necessary mental development and acquisition of language and general knowledge may be as well attained by the Oral method, which results in speech and speech-reading, as by the Manual method, which precludes this much-to-be-desired result. So far as circumstances permit, such method (or methods) is chosen for each pupil as seems best adapted to his needs and capacity after thorough trial. In short, the rule will be: *Any method for good results—all methods, and wedded to none.*

17. The institution is nonsectarian, but thorough moral and religious instruction will be given, especially on the Sabbath, the nature of it being general, and such as is accepted by all churches and creeds.

Sec. 3070, R. S. 1901. No sectarian tenets of religion shall be taught in the institution to any pupil thereof.

18. The parents and friends of the pupils may visit them as often as they wish and whenever they deem it proper, but they should be careful not to abuse this privilege to the harm of the pupil, who must be withdrawn from school room or shop for the purpose. Parents and friends, or those bringing pupils to or taking them away from the institution, can not be furnished meals or lodging.

19. Being Sec. 3004, R. S. 1901. Whenever it shall be deemed necessary by the proper officers of the Institution in accordance with the by-laws and regulations to have any pupil removed, either temporarily or on account of ill-health, or the vacation of the school, or permanently on account of having completed his course of instruction, or been found disqualified from any cause for a longer continuance in the school, the parents or guardians of such pupil, if he have any, shall promptly remove him upon the requirement of said officers; and, in case he shall not be thus provided for, it shall be the duty of the superintendent of the Institution to cause him to be removed and delivered to the trustee of the township where he resided before coming to the institution; and the expense of such removal shall be refunded in the same manner as provided in Sections 3001 and 3002; and the county treasurer shall charge the same to the proper township and collect it in the manner as provided in aforesaid sections.

20. All business letters or letters of inquiry in regard to pupils or their concerns, or in regard to new pupils whom it may be designed to place in the institution, must be addressed to the superintendent, and not to subordinates (officers, teachers, attendants or employes)—otherwise no attention will be paid to such letters.

PUPILS BY COUNTIES.

THE FOLLOWING TABLE SHOWS, BY COUNTIES, THE NUMBER OF PUPILS ADMITTED AND DISCHARGED DURING THE FISCAL YEAR, AND THE NUMBER REMAINING AND ENTITLED TO THE PRIVILEGES OF THE INSTITUTION ON SEPTEMBER 30, 1907.

COUNTIES.	Ad- mitted.	Dis- charged.	Re- maining.
Adams.....	3	1	2
Allen.....	4		4
Bartholomew.....	3		3
Blackford.....	2	1	1
Boone.....	5		5
Carroll.....	4	2	2
Cass.....	3		3
Clark.....	5		5
Clay.....	4		4
Clinton.....	1		1
Daviess.....	3	1	2
Dearborn.....	3		3
Dekalb.....	1		1
Delaware.....	13		13
Dubois.....	3		3
Elkhart.....	8		8
Fayette.....	1		1
Floyd.....	4		4
Fountain.....	1		1
Fulton.....	1		1
Gibson.....	4		4
Grant.....	6		6
Greene.....	4		4
Hamilton.....	2		2
Hancock.....	3		3
Harrison.....	1		1
Hendricks.....	4	2	2
Henry.....	2	1	1
Howard.....	11	1	10
Huntington.....	5	1	4
Jackson.....	2		2
Jasper.....	2		2
Jay.....	10		10
Jefferson.....	4	1	3
Johnson.....	7		7
Knox.....	9	2	7
Kosciusko.....	1		1
Lagrange.....	4	1	3
Lake.....	4		4
Laporte.....	7		7
Lawrence.....	3		3
Madison.....	6		6
Marion.....	43	7	36
Marshall.....	5		5
Martin.....	1		1
Miami.....	3		3
Monroe.....	1		1
Montgomery.....	1		1
Morgan.....	5	1	4
Newton.....	2		2

PUPILS BY COUNTIES—Continued.

COUNTIES.	Ad- mitted.	Dis- charged.	Re- main- ing.
Noble.....	2		2
Ohio.....	1		1
Orange.....	3		3
Owen.....	3		3
Perry.....	2		2
Pike.....	10	1	9
Porter.....	2		2
Posey.....	5		5
Pulaski.....	2		2
Putnam.....	5		5
Randolph.....	1		1
Ripley.....	1		1
Rush.....	2		2
Shelby.....	5		5
Spencer.....	4		4
Starke.....	2		2
St. Joseph.....	8	1	7
Steuben.....	4	1	3
Sullivan.....	9		9
Switzerland.....	2		2
Tippecanoe.....	6		6
Tipton.....	1		1
Vanderburgh.....	10	1	9
Vermillion.....	1		1
Vigo.....	14		14
Wabash.....	4		4
Warrick.....	3		3
Washington.....	3		3
Wayne.....	3		3
Wells.....	3	2	1
White.....	1		1
Whitley.....	1		1
Totals.....	357	28	329
Number Admitted During Year.....		357	
Number Discharged During Year.....		28	
Number in Attendance at End of Year...		329	
Leaving Enrolled and Not in Attendance.		274	
		55	

ROSTER

OF PUPILS IN ATTENDANCE DURING THE FISCAL YEAR
(ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907.

NAME.	Year Ad- mitted.	Postoffice	County.
Abbott, Kate.....	1903	Algiers.....	Pike.
Addison, James W.....	1906	Seafield.....	White.
Albright, William F.....	1899	Hope.....	Bartholomew.
Allen, Otto E.....	1904	Linton.....	Greene.
Allen, Robert W.....	1905	Fredericksburg.....	Washington.
Allen, Leonard H.....	1903	Shoals.....	Martin.
Alley, Rilla R.....	1901	Lincoln City.....	Spencer.
Allman, Lida E.....	1899	Michigan City.....	Laporte.
Allman, Elmer S.....	1902	Michigan City.....	Laporte.
Ambuhl, Dora R.....	1903	Indianapolis.....	Marion.
Amos, Carrie.....	1903	Sturgis (Michigan).....	Lagrange.
Anderson, Geneva.....	1903	South Bend.....	St. Joseph.
Anderson, Lorel G.....	1906	Bryant.....	Jay.
Armstrong, Mary E.....	1906	Union City.....	Randolph.
Arnot, Pansy G.....	1897	Michigan City.....	Laporte.
Badders, Fred.....	1906	Portland.....	Jay.
Bartlett, Ralph M.....	1906	Dunkirk.....	Jay.
Bain, Claude I.....	1906	Martinsville.....	Morgan.
Barrett, C. Dot.....	1896	Middletown.....	Henry.
Barnett, Loretta V.....	1905	Kokomo.....	Howard.
Barker, Ernest F.....	1900	Peru.....	Miami.
Batchelor, Carl E.....	1903	Indianapolis.....	Marion.
Bechtel, Mary Lucile.....	1907	Marion.....	Grant.
Bennett, Harry P.....	1896	Patoka.....	Gibson.
Bettag, Alois.....	1900	Jasper.....	Dubois.
Bettag, Paul.....	1901	Jasper.....	Dubois.
Bettag, Justina.....	1906	Jasper.....	Dubois.
Bickel, Catherine D.....	1907	Floyd Knobs.....	Floyd.
Bickel, Lorena C.....	1906	Floyd Knobs.....	Floyd.
Bissey, Charles B.....	1894	Plainville.....	Daviess.
Billings, Bertie.....	1906	Columbus.....	Bartholomew.
Black, Henry C.....	1901	Spencer.....	Owen.
Blackitor, Frank.....	1903	Ayrshire.....	Pike.
Blackwood, Turner T.....	1900	Sanborn.....	Knox.
Blose, George W.....	1898	Mt. Etna.....	Huntington.
Boone, Walter.....	1905	Oaktown.....	Knox.
Bond, William.....	1901	Evansville.....	Vanderburgh.
Bosh, Phoebe G.....	1901	Twelve Mile.....	Cass.
Brackall, Hulda.....	1904	Terre Haute.....	Vigo.
Bradbury, Eunice H.....	1907	Indianapolis.....	Marion.
Bradley, William F.....	1906	Shelburn.....	Sullivan.
Bragg, Minnie.....	1905	Noblesville.....	Hamilton.
Brenton, Ethel.....	1896	Southport.....	Marion.
Brenton, Clarence.....	1897	Southport.....	Marion.
Bridges, Raymond M.....	1898	Franklin.....	Johnson.
Buhler, Grace D.....	1900	Decatur.....	Adams.
Burford, Elmer J.....	1898	Bridgeport.....	Marion.
Burford, George.....	1898	Bridgeport.....	Marion.
Butler, Glenn.....	1897	Huntington.....	Huntington.
Byers, Milburn E.....	1905	Vincennes.....	Knox.
Cannon, Alice M.....	1899	Petersburg.....	Pike.
Carr, Edwin.....	1905	Mitchell.....	Lawrence.
Carmichael, Glen.....	1901	Swayzee.....	Grant.
Catterlin, Julia M.....	1903	Frankfort.....	Clinton.
Chesnut, Bertha H.....	1904	Odon.....	Daviess.

ROSTER OF PUPILS—Continued.

NAME.	Year Ad- mitted.	Postoffice.	County.
Chrismer, Hattie E.....	1902	Montpelier.....	Blackford.
Chrustowski, Henry.....	1907	East Chicago.....	Lake.
Clampitt, Charles D.....	1903	Colburn.....	Tippecanoe.
Clampitt, Chester L.....	1906	Colburn.....	Tippecanoe.
Clampitt, Harry J.....	1900	Colburn.....	Tippecanoe.
Clark, Harold L.....	1900	Rensselaer.....	Jasper.
Clark, George E.....	1896	Attica.....	Fountain.
Clark, Ida G.....	1898	Aurora.....	Dearborn.
Clausen, Carl.....	1905	Elkhart.....	Elkhart.
Clites, Erna R.....	1901	Indianapolis.....	Marion.
Clipp, Vance S.....	1904	Greenville.....	Floyd.
Clouser, Amos.....	1900	Windfall.....	Tipton.
Cobb, Harold M.....	1904	Indianapolis.....	Marion.
Coers, Iva Marie.....	1907	Gwynneville.....	Shelby.
Coffel, Leona.....	1906	Terre Haute.....	Vigo.
Comer, Hazel.....	1906	Roanake.....	Huntington.
Cornelius, Damon H.....	1905	Whiteland.....	Johnson.
Coughenour, Margaret.....	1905	Logansport.....	Cass.
Coval, Fred.....	1906	Indianapolis.....	Marion.
Cummings, Harry E.....	1903	Alexandria.....	Madison.
Cunningham, Jeannette M.....	1904	Indianapolis.....	Marion.
Curtis, Madge.....	1903	Lebanon.....	Boone.
Dague, Mabel.....	1904	Deedsville.....	Miami.
Dangerfield, Anna.....	1901	Peru.....	Miami.
Davis, Stanley M.....	1897	Pimento.....	Vigo.
Dazey, Lee E.....	1897	Indianapolis.....	Marion.
Decker, Pansy.....	1902	Vincennes.....	Knox.
Delise, Peter.....	1903	Vincennes.....	Knox.
Denny, John W.....	1903	Wabash.....	Wabash.
Dixon, James Nathan.....	1907	Switz City.....	Greene.
Doty, Plat.....	1898	Eaton.....	Delaware.
Doughty, William E.....	1899	Cannelton.....	Perry.
Doudt, Ethel R.....	1901	Angola.....	Steuben.
Doudt, Owen E.....	1901	Angola.....	Steuben.
Dranginus, Eva.....	1905	Staunton.....	Clay.
Dranginus, John.....	1900	Staunton.....	Clay.
Dryer, Martin.....	1902	Lafayette.....	Tippecanoe.
Dunn, Reba E.....	1898	Terre Haute.....	Vigo.
Eberhard, Otto H.....	1900	Mt. Vernon.....	Posey.
Edmunds, Don E.....	1898	Plainfield.....	Hendricks.
Ele, Lollie F.....	1902	Winamac.....	Pulaski.
Elder, Leo U.....	1902	Indianapolis.....	Marion.
Estell, Addie M.....	1900	Morristown.....	Shelby.
Evans, Lennie D.....	1905	Bowers.....	Montgomery.
Farmer, William.....	1903	Jeffersonville.....	Clark.
Farris, James Robert.....	1907	Terre Haute.....	Vigo.
Featheringill, Elenor R.....	1904	New Albany.....	Floyd.
Ferninger, John R.....	1901	Evansville.....	Vanderburgh.
Fingerly, Jessie O.....	1903	Indianapolis.....	Marion.
Fish, Evalena.....	1900	Anderson.....	Madison.
Ford, Sadie M.....	1906	Thorntown.....	Boone.
Forgey, John C.....	1900	Ewing.....	Jackson.
Foster, Lula H.....	1901	Indianapolis.....	Marion.
Foster, Ruth B.....	1906	Edwards.....	Vigo.
Fox, Frederick.....	1905	Indianapolis.....	Marion.
Frakes, Charles E.....	1904	Terre Haute.....	Vigo.
Frazer, Frederick LeRoy.....	1907	Richmond.....	Wayne.
French, Nora M.....	1904	Aurora.....	Dearborn.
Fremont, Helen M.....	1903	Terre Haute.....	Vigo.
Froment, Gladys E.....	1902	Shelburn.....	Sullivan.

ROSTER OF PUPILS—Continued.

NAME.	Year Ad- mitted.	Postoffice.	County.
Gardner, Lee.....	1906	Russellville.....	Putnam.
Gardner, Roy.....	1903	Balbec.....	Jay.
Garlitch, Clara A.....	1895	Shelbyville.....	Shelby.
Gatton, Essie M.....	1897	Winslow.....	Pike.
Gerichs, Emory.....	1904	Petersburg.....	Pike.
Goransson, Hilda A.....	1902	Porter.....	Porter.
Gray, George M.....	1906	Thornton.....	Boone.
Gray, William T.....	1901	Lowell.....	Lake.
Greiner, Edith A.....	1902	Anderson.....	Madison.
Greer, Oliver.....	1904	Russiaville.....	Howard.
Grise, Luella F.....	1898	Bremen.....	Marshall.
Groves, Roberta M.....	1906	Indianapolis.....	Marion.
Haase, Celeste K.....	1902	Indianapolis.....	Marion.
Hahn, Maggie Nora.....	1907	Cypress.....	Vanderburg.
Hampton, Annie I.....	1905	Greencastle.....	Putnam.
Hannel, Robert T.....	1899	DePauw.....	Harrison.
Harbison, Charles W.....	1904	Petersburg.....	Pike.
Harding, Robert.....	1907	Kokomo.....	Howard.
Harrison, Amy C.....	1901	Gerald.....	Perry.
Harrison, Blanche.....	1903	Martinsville.....	Morgan.
Hargis, Roscoe F.....	1900	Edinburg.....	Johnson.
Harlow, Edith M.....	1905	French Lick.....	Orange.
Henson, Flois.....	1904	Paoli.....	Orange.
Herran, Donald.....	1905	Huntington.....	Huntington.
Herzberg, Joseph.....	1900	Indianapolis.....	Marion.
Hesh, Elmer E.....	1902	Wakarusa.....	Elkhart.
Hetzler, Eula B.....	1905	Angola.....	Steuben.
Hetzler, Hafford D.....	1905	Angola.....	Steuben.
Hiatt, Roy P.....	1901	Terre Haute.....	Vigo.
Hinkley, Earl.....	1899	Mt. Vernon.....	Posey.
Hinkley, William.....	1896	Mt. Vernon.....	Posey.
Hinton, Earl J.....	1900	Greencastle.....	Putnam.
Hitchens, Mary B.....	1904	Muncie.....	Delaware.
Hogan, Myrtle E.....	1894	Indianapolis.....	Marion.
Hogle, Roy H.....	1901	Marion.....	Grant.
Holler, Maggie S.....	1901	Nappanee.....	Elkhart.
Hoot, Lillian R.....	1902	Monterey.....	Pulaski.
Hopper, Amy B.....	1906	Dunkirk.....	Jay.
Houchins, James L.....	1901	Chandler.....	Warrick.
Hughes, Narvle W.....	1899	Columbus.....	Bartholomew.
Hummel, Milton F.....	1898	Bremen.....	Marshall.
Hunt, Mary Margaret.....	1907	Spencer.....	Owen.
Hunter, Louise.....	1900	Indianapolis.....	Marion.
Huron, Leroy B. F.....	1904	Danville.....	Hendricks.
Hurwitz, Hyman.....	1898	Terre Haute.....	Vigo.
Huston, Everette E.....	1902	Markle.....	Huntington.
Hutchings, Mary E.....	1900	Marysville.....	Clark.
Isham, Iva.....	1902	Laporte.....	Laporte.
Jackson, James.....	1902	Clinton.....	Vermillion.
Johnson, Bertha L.....	1897	Wabash.....	Wabash.
Johnson, C. Mabel.....	1895	Kokomo.....	Howard.
Johnson, Earl L.....	1894	Indianapolis.....	Marion.
Johnson, Henry L.....	1905	Evansville.....	Vanderburgh.
Jones, Agnes E.....	1900	Muncie.....	Delaware.
Jones, Dawson W.....	1904	Evansville.....	Vanderburgh.
Jones, Martha K.....	1903	Evansville.....	Vanderburgh.
Kaiser, Elsie.....	1902	Hammond.....	Lake.
Keagy, Effie.....	1903	Coal City.....	Owen.
Keene, William A.....	1902	Wheatfield.....	Jasper.
Kercher, George F.....	1897	Roann.....	Wabash.

ROSTER OF PUPILS—Continued.

NAME.	Year Ad- mitted.	Postoffice.	County.
Ketner, Arthur L.	1900	Indianapolis	Marion.
Ketner, Iva P.	1902	Indianapolis	Marion.
King, Wilber R.	1906	Jeffersonville	Clark.
Kirkwood, Milo	1896	Mauzy	Rush.
Kirkey, Anna M.	1901	Decker	Knox.
Klepfer, Bessie H.	1899	Indianapolis	Marion.
Koewler, Carrie	1905	Evansville	Vanderburgh.
Kolb, Arley E.	1899	Zionsville	Boone.
Kristl, Julia H.	1897	South Bend	St. Joseph.
Kunkel, Eda A.	1898	Michigan City	Laporte.
LaFountain, Lewis C.	1905	Laporte	Laporte.
Laffoon, William R.	1904	Brook	Newton.
Landis, Jesse C.	1900	Monroe	Jay.
Landis, Mary E.	1904	Monroe	Jay.
Landis, Raymond	1902	Monroe	Jay.
Langebrake, Frieda W.	1906	Howell	Vanderburgh.
Lauber, Mildred H.	1905	South Bend	St. Joseph.
Lawless, Robert H.	1903	New Harmony	Posey.
Lester, Ralph	1901	Lesterville	Washington.
Locke, Grace V.	1900	Richmond	Wayne.
Loftus, Leo	1905	Indianapolis	Marion.
Long, Myrtle M.	1906	Wawaka	Noble.
Long, William Clarence	1907	Russiaville	Howard.
Lyster, Pearl	1899	Indianapolis	Marion.
Lyster, Thomas J.	1903	Indianapolis	Marion.
Malatin, George J.	1907	Hammond	Lake.
Mansfield, Mary M.	1902	Eaton	Delaware.
Martin, Amy W.	1894	Indianapolis	Marion.
Marquardt, Frederick T.	1902	Valparaiso	Porter.
Merry, Bessie	1901	Mitchell	Lawrence.
Mettler, Maze L.	1901	Columbia City	Whitley.
Meyers, John E.	1899	Ayrshire	Pike.
Migatz, Abraham	1904	Whiting	Lake.
Milam, Carse C.	1900	Indianapolis	Marion.
Milhon, Eva	1906	Little Point	Morgan.
Miller, Wilma E.	1899	Anderson	Madison.
Miller, Albert E.	1904	Woodburn	Allen.
Miller, Anna	1906	Middlebury	Elkhart.
Miller, Laura M.	1906	Middlebury	Elkhart.
Miller, Melvin	1907	Middlebury	Elkhart.
Miller, Clara H.	1906	Osceola	St. Joseph.
Miller, Eva Pearl	1907	Kokomo	Howard.
Miller, Clevie C.	1903	Littles	Pike.
Miller, Clarence E.	1897	Littles	Pike.
Miller, Martha	1904	Trafalgar	Johnson.
Millholland, Rosana M.	1905	Jeffersonville	Clark.
Mobley, Bertrand	1905	Indianapolis	Marion.
Morlock, Arthur G.	1906	Mt. Vernon	Posey.
Morris, Ghomer E.	1901	Harmony	Clay.
Mullikin, Earl E.	1899	Brazil	Clay.
Murphy, Guy A.	1898	Gaston	Delaware.
Murphy, Lillian E.	1897	Muncie	Delaware.
Murphy, Martha L.	1897	Muncie	Delaware.
Mutter, Henry	1896	Danville	Hendricks.
Myers, John C.	1901	Plymouth	Marshall.
Myers, Dessie B.	1901	Plymouth	Marshall.
McBride, E. Grace	1902	Cambridge City	Wayne.
McFadden, Viola E.	1899	Muncie	Delaware.
McKinney, Daniel	1902	Bicknell	Knox.
McKinney, William H.	1903	Lawrenceburg	Dearborn.

ROSTER OF PUPILS—Continued.

NAME.	Year Ad- mitted.	Postoffice.	County.
McCollum, Virgia I.	1903	Locust Point.....	Harrison.
Naugle, Mary M.	1896	Salem.....	Washington.
Neiderberger, Ella.....	1903	Muncie.....	Delaware.
Newman, Edith V.	1901	Charlestown.....	Clarke.
Newman, Myrtle E.	1899	Napoleon.....	Ripley.
Nipple, Blanche L.	1897	Camden.....	Carroll.
Niece, Carrie.....	1904	Edwards.....	Vigo.
Niehaus, Louis E.	1904	Evansville.....	Vanderburgh.
Ofenloch, Stella B.	1904	Ft. Wayne.....	Allen.
Ofenloch, Edith E.	1904	Ft. Wayne.....	Allen.
Okes, Harold.....	1907	Terre Haute.....	Vigo.
Oliver, Ethel L.	1903	Van Buren.....	Grant.
Ort, Margarete.....	1905	Mishawaka.....	St. Joseph.
Osborn, Lawrence E.	1900	Rockport.....	Spencer.
Osborn, Lonney C.	1903	Rockport.....	Spencer.
Osborn, Lucy E.	1896	Rockport.....	Spencer.
Owens, George I.	1899	Kokomo.....	Howard.
Parish, Cyril A.	1899	Lagrange.....	Lagrange.
Parker, Goldie E.	1903	Delphi.....	Carroll.
Parker, Ruth M.	1900	Ft. Wayne.....	Allen.
Pattengale, Ora A.	1904	Dayton.....	Tiptecanoe.
Patterson, C. Marsh.....	1905	Muncie.....	Delaware.
Perkins, Claude M.	1897	Lebanon.....	Boone.
Pierce, Alexander C.	1895	Kokomo.....	Howard.
Phillips, Harley G.	1904	Deputy.....	Jefferson.
Porter, Garvey J.	1905	Lamb.....	Switzerland.
Potter, Commodore.....	1906	Madison.....	Jefferson.
Powell, Albert W.	1903	South Bend.....	St. Joseph.
Powell, Fred M.	1900	South Bend.....	St. Joseph.
Pretz, Martin.....	1903	Elberfeld.....	Warrick.
Puckett, Freeley Luster.....	1907	Shelburn.....	Sullivan.
Purdy, Alvin L.	1901	Morocco.....	Newton.
Ralston, M. Lawrence.....	1896	Brooksbury.....	Jefferson.
Reid, Minnie M.	1901	Portland.....	Jay.
Reinke, Carlon.....	1906	Michigan City.....	Laporte.
Renicker, Clara M.	1902	Ockley.....	Carroll.
Rhoads, Effie.....	1900	Algiers.....	Pike.
Riall, Aurelius Otto.....	1907	Muncie.....	Delaware.
Riggs, Harry.....	1907	Aurora.....	Ohio.
Riley, Leonora.....	1901	Brightwood.....	Marion.
Riley, Nina E.	1902	Brightwood.....	Marion.
Roberts, Alethea.....	1904	Indianapolis.....	Marion.
Roeder, Osa E.	1906	Dugger.....	Sullivan.
Rollings, Claude E.	1900	Reelsville.....	Putnam.
Rollings, Joseph L.	1904	Reelsville.....	Putnam.
Rue, Clarice Loraine.....	1907	Logansport.....	Cass.
Runyon, Dewey Levi.....	1907	Greenwood.....	Johnson.
Runyon, Oakley.....	1898	Kokomo.....	Howard.
Rupkey, Goldie F.	1902	New Palestine.....	Hancock.
Saine, Andrew J.	1906	North Judson.....	Starke.
Saine, Mary C.	1899	North Judson.....	Starke.
Sanders, Ada M.	1901	Indianapolis.....	Marion.
Sawyer, Leah F.	1897	Bluffton.....	Wells.
Satterfield, Grace B.	1900	Muncie.....	Delaware.
Schmidt, Carl F.	1901	Madison.....	Jefferson.
Sawicki, Camilla M.	1906	South Bend.....	St. Joseph.
Shaffer, Fred L.	1901	Craigville.....	Wells.
Shields, Lola M.	1905	New Castle.....	Henry.
Sheely, Tillman.....	1904	Washington.....	Daviess.
Shelby, Mary B.	1901	Greenfield.....	Hancock.

ROSTER OF PUPILS—Continued.

NAME.	Year Admitted.	Postoffice.	County.
Snoptaugh, Earle J.	1904	Terre Haute	Vigo.
Siegmund, Alfred H.	1899	Wabash	Wabash.
Smith, Nina Marie	1907	Kokomo	Howard.
Sosomen, Vernon A.	1895	Plymouth	Marshall.
Spacke, Charles	1902	Indianapolis	Marion.
Spangler, Margie J.	1902	Muncie	Delaware.
Spencer, May L.	1901	Terre Haute	Vigo.
Speer, Fred M.	1904	Lafayette	Tippecanoe.
Spitzfaden, Peter	1904	Indianapolis	Marion.
Stewart, Alice	1899	Shelburn	Sullivan.
Stone, Lillian J.	1906	Connersville	Fayette.
Stout, Mabel I.	1906	Bloomington	Monroe.
Stoltz, Walter	1896	Wanatah	Laporte.
Street, Alfretta A.	1901	Anderson	Madison.
Street, Edgar B.	1899	Anderson	Madison.
Stouder, Edna R.	1901	Nappanee	Elkhart.
Stroud, Jontie H.	1900	Matthews	Grant.
Sullivan, Darwin A.	1906	Hazellton	Gibson.
Surber, Fred J.	1904	London	Shelby.
Surber, Henry H.	1899	London	Shelby.
Sutton, Lola P.	1901	Iuka	Orange.
Swafford, Hazel E.	1903	Marion	Grant.
Sweeney, John P.	1898	Indianapolis	Marion.
Taylor, Mabel F.	1906	Indianapolis	Marion.
Thuis, Otto L.	1904	Vincennes	Knox.
Thompson, Flossie M.	1897	Oakland City	Gibson.
Truax, A. Grace	1896	Paragon	Morgan.
Tutorow, Florence L.	1903	Wilkinson	Hancock.
Venable, Helen C.	1906	Indianapolis	Marion.
Virgin, John C.	1896	Fishers Switch	Hamilton.
Vorhees, John W.	1901	Dunkirk	Jay.
von Hippel, Herman K. E.	1906	Newburg	Warrick.
Wainscott, Russell C.	1906	Bennington	Switzerland.
Wall, Essie M.	1898	Dugger	Sullivan.
Wallace, Ola	1907	Shelburn	Sullivan.
Wardell, John B.	1903	Farmersburg	Sullivan.
Wardell, Kate Loraine	1907	Farmersburg	Sullivan.
Warfield, Lottie E.	1906	Manilla	Rush.
Wasson, Hazel A.	1898	Bluffton	Wells.
Watkins, Warren M.	1905	Linton	Greene.
Weare, Callie M.	1905	Edinburg	Johnson.
Weimer, Glenn	1899	Willshire (Ohio)	Adams.
Wernitz, Emma E.	1898	Warsaw	Kosciusko.
Wesling, Carl H.	1904	Indianapolis	Marion.
West, Cally M.	1904	Kokomo	Howard.
White, Etta	1905	Edinburg	Johnson.
White, Lucy	1904	Patoka	Gibson.
White, Samuel E.	1906	Vincennes	Knox.
Whitaker, Madalene L.	1905	Indianapolis	Marion.
Wickersham, Clara V.	1905	Plainfield	Hendricks.
Wiggers, William J.	1904	Cypress	Vanderburgh.
Wilson, Clarence L.	1905	Seymour	Jackson.
Wilson, Walter G.	1896	Cutler	Carroll.
Woodward, Gladys D.	1899	Mooreville	Morgan.
Worthmann, Ida A.	1898	Magley	Adams.
Worster, George W.	1899	Cedar	Dekalb.
Wright, Arista	1899	Marco	Greene.
Wright, Goldie L.	1906	Rochester	Fulton.
Wright, Lois L.	1906	Bedford	Lawrence.
Yarian, Alvin R.	1895	LaOtto	Noble.

ROSTER OF PUPILS—Continued.

NAME.	Year Ad- mitted.	Postoffice.	County.
Yoder, R. Otis	1897	Shipshewana	Lagrange.
Yoder, William S.	1899	Shipshewana	Lagrange.
Yoder, Orpha B.	1898	Wakarusa	Elkhart.
Zeller, Mary	1904	Indianapolis	Marion.
Zimmerman, Vernon H.	1895	Hartford City	Blackford.

EXHIBIT No. 1.

CONDENSED FINANCIAL STATEMENT FOR FISCAL YEAR
(ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907.

Annual Appropriations—		Expenditures—	
Maintenance, \$70,000.00 *less		Maintenance	\$64,187 16
\$5,833.33	\$64,166 67	Industrial	3,754 65
Maintenance excess	31 76	Repairs	916 44
Industries, \$4,500.00 *less		Balances, etc., to General Fund—	
\$375.00	4,125 00	Maintenance	\$11 27
Repairs, \$1,000.00 *less \$83.33	916 67	Industrial	370 35
Earnings—		Repairs	23
Industrial	538 71	Earnings paid State	
Ordinary	167 81	Treasurer	706 52
Clothing Accounts (included in		Clothing Accounts to	
maintenance)	922 77	State Treasurer for	
		collection	922 77
			2,011 14
	\$70,869 39		\$70,869 39

*One-twelfth of the annual appropriations for each fund deducted on account of fiscal year ending September 30th instead of October 31st.

EXHIBIT No. 2.

A CLASSIFIED STATEMENT OF EXPENDITURES ON ACCOUNT
MAINTENANCE FOR FISCAL YEAR (ELEVEN MONTHS)
ENDING SEPTEMBER 30, 1907.

MAINTENANCE.

Attendance—		Grounds, Stock and Stable—	
Trustee's salary.....	\$975 00	Farm and garden expense.....	\$20 05
Officers, S. and W.....	5,573 45	Greenhouse and park expense.....	101 94
Teachers, S. and W.....	18,600 48	Live stock.....	200 00
Attendants, S. and W.....	2,928 66	Provender.....	748 50
Artisans, S. and W.....	4,294 15	Stable expense.....	401 60
Domestics, S. and W.....	4,969 84		
Office Expense—		Food Supplies—	
Blank books.....	49 75	Beans, hominy, rice, etc.....	263 63
Postage.....	69 60	Breadstuffs.....	1,206 37
Superintendent's expense fund.....	250 00	Butter.....	1,339 53
Stationery and printing.....	117 29	Canned fruits.....	699 95
Telegraphage.....	11 86	Canned vegetables.....	421 60
Telephones.....	117 64	Canned meats and fish.....	44 90
Miscellaneous office expense.....	54 37	Coffee and tea.....	283 43
		Dried fruits.....	114 58
Household Equipment—		Eggs.....	365 36
Bedding.....	222 70	Fish and oysters.....	98 81
Brooms, buckets, mops, etc.....	141 91	Green fruits.....	308 68
Cutlery and spoons.....	4 75	Ice.....	440 48
Carpets, shades, etc.....	462 15	Jellies, preserves, etc.....	161 56
Disinfectants, etc.....	74 29	Lard.....	200 71
D. R. K. metal and woodenware.....	61 32	Meats, fresh.....	2,584 87
House furniture and upholstery.....	90 75	Meats, smoked, salt, etc.....	944 15
Laundry appliances.....	93 36	Mackerel, codfish, herring, etc.....	25 45
Napery.....	52 84	Poultry.....	517 77
Queensware.....	116 56	Pickles, kraut and vinegar.....	63 69
Soap, soap stock, polishers, etc.....	1,023 58	Sugar.....	688 25
Toweling.....	124 08	Syrup.....	110 31
Toilet supplies.....	65 61	Sauces, extracts, spices and salt.....	118 63
Miscellaneous household.....	188 26	Vegetables.....	769 27
		Unclassified food supplies.....	60 89
School Expense—		Pupils Personal Expense—	
Annals of the deaf.....	66 00	Uniforms or suits.....	572 39
Art supplies.....	70 74	Shoes, etc.....	51 05
Library.....	4 50	Other clothing.....	141 44
Newspapers and periodicals.....	33 85	Transportation, etc.....	87 96
School supplies.....	348 86	Miscellaneous P. P. E.....	50 20
Heat, Light and Power—		Miscellaneous Classifications—	
Engineer's supplies.....	258 07	Amusements.....	123 69
Electrician's supplies.....	110 31	Annual reports.....	189 75
Electric light.....	109 80	Drugs, medicines and appli- cances.....	313 98
Fuel.....	5,610 31	Fire protection and insurance.....	45 84
Gas light.....	803 92	Trustees' traveling expense.....	315 66
		Watchman's service.....	137 50
		Miscellaneous general expense.....	41 00
		Special nurse.....	165 00
		Water supply.....	183 33
		New institution expense.....	34 25
		Repairs, maintenance.....	466 45
		Papering, maintenance.....	62 10
		Total.....	\$64,437 16

RECAPITULATION.

Attendance.....	\$37,341 58	Grounds, stock and stable.....	\$1,472 09
Office expense.....	670 51	Food supplies.....	11,832 87
Household equipment.....	2,722 16	Pupils, personal expense.....	903 04
School expense.....	523 95	Miscellaneous classifications.....	2,078 55
Heat, light and power.....	6,892 41		
		Total.....	\$64,437 16

EXHIBIT No. 3.

A CLASSIFIED STATEMENT OF EXPENDITURES ON ACCOUNT
CURRENT EXPENSES AND REPAIRS DURING FISCAL YEAR
(ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907.

Current Expenses and Repairs—

Cement, brick, stone, lime, etc.....	\$7 70
Engineer's supplies and repairs.....	2 00
Electrical supplies and repairs.....	180 05
Glass, putty, etc.....	37 70
Hardware	32 80
Lumber	122 48
Miscellaneous improvements and repairs.....	55 69
Miscellaneous housecleaning	1 20
Plastering	31 10
Painters' supplies	89 49
Plumbing supplies and repairs.....	117 44
Roof repairs, etc.....	14 31
Steam heating and repairs.....	67 98
Water supply and repairs.....	57 00
Whitewashing	99 50
Total	\$916 44

EXHIBIT No. 4.

A CLASSIFIED STATEMENT OF EXPENDITURES ON ACCOUNT IN-
DUSTRIES DURING FISCAL YEAR (ELEVEN MONTHS) ENDING
SEPTEMBER 30, 1907.

Industrial Expense—

Printing office S. and W.....	\$799 67
Cabinet shop S. and W.....	621 50
Shoe and harness shop, S. and W.....	496 28
Sewing room, S. and W.....	330 00
Printing office material.....	372 61
Cabinet shop material.....	326 38
Shoe shop material	762 00
Sewing room material.....	46 21
Total	\$3,754 65

EXHIBIT No. 5.

PRODUCTS OF THE FARM AND GARDEN DURING FISCAL YEAR
(ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907.

Beans, bushels, 5.....	\$3 07
Beans, Lima, gallons, 4.....	2 60
Beets, bunches, 20.....	23
Beets, bushels, 12¾.....	5 40
Cabbage, heads, 915.....	22 82
Corn, dozens, 127.....	6 36
Corn, fodder, shocks, 10.....	3 00
Cucumbers, 5,145.....	18 57
Grapes, pounds, 374.....	10 92
Lettuce, pounds, 220¼.....	11 86
Milk, gallons, 5,872.....	880 81
Onions, dozens, 43¼.....	4 56
Onions, bushels, 15.....	11 25
Peas, bushels, 1¼.....	1 23
Peppers, pecks, 2¼.....	90
Pieplant, dozens, 80½.....	10 73
Radishes, dozens, 36½.....	4 05
Sour kraut, gallons, 35.....	5 25
Tomatoes, bushels, 13.....	7 65
Veal, pounds, 217.....	17 36
Total	\$1,028 62

EXHIBIT No. 6.

AN ITEMIZED ACCOUNT OF ALL CASH EARNINGS RECEIVED
DURING THE FISCAL YEAR (ELEVEN MONTHS)
ENDING SEPTEMBER 30, 1907.

1906.

Nov. 1. John Hutsel, error in October pay-roll, October 1 to 14, inclusive, 14 days, at \$35.00 per month	\$15 81
“ 1. Mattie McCarty, error in October pay-roll, October 28 to 31 inclusive, 4 days, at \$30.00 per month	3 87
“ 1. Jos. Kinley, 60 lbs. rags.....	60
“ 15. Unknown, 2 loads cinders	40
“ 15. E. Smith, 4 calf hides, October 30.....	4 77
“ 15. Unknown, 7 loads cinders	1 40
“ 30. Unknown, 8 loads cinders	2 00

EXHIBIT No. 6—Continued.

Nov. 30.	Olds Soap Co., 344 lbs. tallow, at 5½c.....	\$18 92	
" 30.	Printing office, subscriptions.....	4 50	
" 30.	Cabinet shop, sales	5 70	
" 30.	Shoe shop, October and November private account pupils	54 60	
Total receipts for November, 1906.....			\$112 57
Dec. 10.	Unknown, 5 loads cinders	\$1 20	
" 10.	C. Martin, 750 pounds iron, at 45c.....	3 39	
" 10.	C. Martin, 61 pounds brass, at 2½c.....	1 53	
" 11.	Nellie McHugh, over payment for November	2 50	
" 13.	R. O. Johnson, 16 yards muslin	1 00	
" 22.	E. Smith, 1 calf hide	1 75	
" 24.	W. R. Schoff, slops, February, March, April, 1907	5 00	
" 31.	Shoe shop, Dec. private account pupils.....	31 65	
" 31.	Printing, office subscriptions	3 05	
" 31.	Cabinet shop, sales	9 52	
Total receipts for December, 1906.....			\$60 59
1907.			
Jan. 4.	Owen Doudt, pupil, broken window.....	\$0 25	
" 12.	Wm. Bradley, pupil, uniform coat from store- room	4 00	
" 12.	Commodore Potter, pupil, uniform pants from storeroom	1 75	
" 31.	Printing office, subscriptions	1 50	
" 31.	Cabinet shop, sales	5 45	
" 31.	Shoe shop, January private account pupils..	56 15	
" 31.	Shoe shop, outside accounts	12 60	
Total receipts for January, 1907			\$81 70
Feb. 14.	Marion Caldwell, 40 loads cinders	\$10 00	
" 28.	Printing office, subscriptions	25	
" 28.	Shoe shop, February private account pupils	52 95	
" 28.	Cabinet shop, sales	7 25	
Total receipts for February, 1907.....			\$70 45
Mar. 5.	A. Rosenthal, 87 pounds rags	\$0 87	
" 21.	C. Martin, 1,250 pounds bones, at 45c....	5 62	
" 21.	C. Martin, 1,560 pounds iron, at 45c.....	7 02	
" 21.	C. Martin, 95 pounds brass, at 2½c.....	2 38	
" 24.	Unknown, 7 empty barrels	1 90	
" 26.	J. McCarty, service of bull	1 00	
" 30.	Printing office, subscriptions	75	
" 30.	Shoe shop, March private account pupils..	75 15	
" 31.	Cabinet shop, sales	23 75	
Total receipts for March, 1907.....			\$118 44

EXHIBIT No. 6—Continued.

Apr. 1.	R. O. Johnson, Supt., error in Hoosier postage, March 10	\$0 10
" 17.	Unknown, service of bull	1 00
Total receipts for April, 1907.....		\$1 10
1907.		
May 1.	M. Koldike, slops, May, June, July, '07.....	\$5 00
" 1.	A. J. Saine, pupil, cap from storeroom, Apr. 2	1 00
" 1.	F. M. Spear, pupil, cap from storeroom, Apr. 2	1 00
" 1.	V. S. Clipp, pupil, cap from storeroom, Apr. 2	1 00
" 1.	Sam'l E. White, pupil, cap from storeroom, Apr. 23	1 00
" 1.	Thos. J. Lyster, pupil, cap from storeroom, Apr. 23	1 00
" 2.	Cabinet shop, sales	8 05
" 6.	W. Winkley, service of bull	1 00
" 6.	M. C. Hunt, overpayment Dec. 11, '06.....	10
" 7.	A. Rosenthal, 40 pounds rags	40
" 8.	Charles Frakes, pupil, 1 pair pants from storeroom	1 50
" 10.	Shoe shop, April, private account pupils....	58 55
" 11.	Earl Hinton, pupil, broken window	15
" 14.	Charles B. Bissy, pupil, broken lock	50
" 15.	B. Smith, 1 calf hide	1 25
" 31.	Isaac McCollum (ran away Jan. 11, '07) balance due him on cash account pupils.....	3 73
" 31.	Supt. Johnson, pay-roll check due Isaac McCollum, for services, second cook, January 11, '07, dated February 7, '07.....	8 87
" 31.	Cabinet shop sales	19 26
" 31.	Carrie Suitt, paid state from pupils' cash accounts	02
" 31.	Fred Boardman, paid state from pupils' cash accounts	04
" 31.	Ida M. Bassinger, paid state from pupils' cash accounts	06
" 31.	H. O. Potter, paid state from pupils' cash accounts	23
" 31.	Flora M. Rushton, paid state from pupils' cash accounts	33
" 31.	Walter McMullen, paid state from pupils' cash accounts	01
" 31.	Oscar Deckinsheets, paid state from pupils' cash accounts	85
" 31.	Nellie McKinney, paid state from pupils' cash accounts	2 52
" 31.	Brookbanks', paid state from pupils' cash accounts.	1 00
" 31.	John J. Brothers, paid state from pupils' cash accounts	20

EXHIBIT No. 6—Continued.

May 31.	Dora E. Grunealt, paid state from pupils' cash accounts	\$0 23
" 31.	Wm. J. Graham, paid state from pupils' cash accounts	14
" 31.	L. L. Snow, paid state from pupils' cash account	50
" 31.	Sutherlins', paid state from pupils' cash accounts	71
" 31.	Hufnagles', paid state from pupils' cash accounts	11
" 31.	Rolla E. Little, paid state from pupils' cash counts	1 00
" 31.	Cordin Shoptaugh, paid state from pupils' cash accounts	26
" 31.	Isaac Baldwin, paid state from pupils' cash accounts	69
" 31.	Florence Sullivan, paid state from pupils' cash accounts	05
" 31.	Fred E. Looney, paid state from pupils' cash accounts	60
" 31.	Cecil E. Williams, paid state from pupils' cash accounts	05
" 31.	Robert Nelson, paid state from pupils' cash accounts	2 08
" 31.	Henry Kellens, paid state from pupils' cash accounts	47
" 31.	Jos. H. Crawford, paid state from pupils' cash accounts	01
" 31.	J. L. Lockamire, paid state from pupils' cash accounts	60
" 31.	H. P. Miller, paid state from pupils' cash accounts	02
" 31.	Nellie Fulton, paid state from pupils' cash accounts	1 95
" 31.	Ara Stout, paid state from pupils' cash accounts	79
Total receipts for May, 1907		\$128 88
June 12.	Shoe shop, May and June, private accounts pupils	\$86 50
" 12.	Shoe shop, outside accounts	16 05
" 15.	Unknown, 8 loads cinders	2 00
" 20.	Acme Laundry Co., 355 pounds grate bars, at 1½c.	5 33
" 24.	Acme Laundry Co., 138 pounds grate bars, at 1½c.	2 07
" 29.	A Rosenthal, 54 pounds rags	54
Total receipts for June, 1907		\$112 49

EXHIBIT No. 6--Continued.

July	1.	Cabinet shop, sales	\$2 50	
"	10.	Standard Oil Co., 1 empty barrel	1 20	
"	13.	America Fulton, cash in letter	25	
"	25.	M. Caldwell, 13 loads cinders	3 25	
			<hr/>	
Total receipts for July, 1907				\$7 20
Aug.	2.	George Smith, 54 pounds zinc	\$1 08	
"	2.	George Smith, 100 pounds old carpets, etc..	62	
"	2.	George Smith, 2 old ironing stoves and pipes	1 25	
"	5.	C. Sanders, 550 pounds iron, at 45c.....	2 47	
"	5.	C. Sanders, 9 pounds brass, at 9c.....	81	
"	31.	Wm. E. Todd, for Unknown, July 5, '07, 300 pounds iron	1 20	
"	31.	Wm. E. Todd, for Unknown, July 5, '07, 330 pounds rags	3 30	
"	31.	Wm. E. Todd, for Unknown, July 5, '07, 400 pounds bones	1 60	
			<hr/>	
Total receipts for August, 1907				\$12 33
Sept.	2.	R. O. Johnson, Supt., overcharge for stamps, June 4 and July 1.....	\$0 30	
"	6.	A. Rosenthal, 47 pounds rags	47	
			<hr/>	
Total receipts for September, 1907.....				\$0 77
<hr/>				
Sept. 30.		Amount ordinary earnings for year.....	\$167 81	
" 30.		Amount industrial earnings for year.....	538 71	
			<hr/>	
				\$706 52
May 8.		Paid Treasurer of State	\$444 85	
Sept. 25.		Paid Treasurer of State	261 67	
			<hr/>	
				\$706 52

EXHIBIT No. 7.

A SCHEDULE OF ALL ORDERS DRAWN ON TREASURER OF INSTITUTION BY THE BOARD OF TRUSTEES THEREOF, AND PAID BY SAID TREASURER, ACCOUNT MAINTENANCE DURING FISCAL YEAR (ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907. ORIGINAL VOUCHERS IN ITEMIZED FORM, SUBSCRIBED AND SWORN TO BY CLAIMANTS, ON FILE IN OFFICE OF AUDITOR OF STATE. DUPLICATES ON FILE IN OFFICE OF INSTITUTION.

December 11, 1906—

1.	R. O. Johnson, Supt., pay-roll, November, 1906..	\$4,198 04
2.	R. O. Johnson, Supt., miscellaneous expenses....	338 80
3.	Indianapolis Coal Co., coal	1,261 74
4.	J. C. Perry & Co., groceries	434 44
5.	Armour & Company, meats, lard and butterine..	412 76
6.	Charles J. Gardner, meats	216 96
7.	Indianapolis Poultry Co., poultry and eggs	148 79
8.	George T. Evans & Son, flour	102 10
9.	Indianapolis Gas Co., gas and stove connections..	91 57
10.	John W. Newmann & Co., fruits and vegetables .	71 78
11.	John O'Neill, provender	45 00
12.	Coonse & Caylor Ice Co., ice	36 15
13.	Century Biscuit Co., crackers	29 72
14.	Ward Bros. Drug Co., drugs	21 72
15.	Hibben, Hollweg & Co., miscellaneous drygoods..	19 69
16.	Daniel Stewart Co., drugs, etc.....	17 46
17.	Vonnegut Hardware Co., miscellaneous hardware	16 60
18.	Frank G. Kamps, Sr., fish and oysters	15 35
19.	W. B. Peake & Co., miscellaneous groceries	14 98
20.	Henry A. Dreer, seeds and bulbs	12 61
21.	Knight & Jillson Co., engineer's supplies	11 62
22.	M. C. Hunt, soap chips	9 24
23.	The H. Lieber Co., framing photo, etc.....	8 05
24.	Indianapolis Light & Heat Co., electric light....	5 85
25.	Thomas P. Kean, underwear and cap.....	4 75
26.	Techentin & Freiberg, harness repairs, etc.....	3 40
27.	Cain & Llewellyn, drugs and appliances	3 25
28.	Pettis Dry Goods Co., queensware	2 92
29.	Kipp Bros. Co., chamois skins and sponges.....	2 74
30.	Indianapolis Book and Stationery Co., sponges, erasers and files	2 65
31.	Sandborn-Marsh Electric Co., electric fixtures..	2 50
32.	Charles T. Nankervis, binding.....	2 50
33.	The A. Burdsal Co., brushes and butchers' wax.	1 85
34.	C. P. Lesh Paper Co., paper	1 75

EXHIBIT No. 7—Continued.

35. Tiona Refining Co., signal oil	\$1 75
36. Bresette-Pugh Co., infirmory appliances	1 75
37. Webster E. Dietz, white cornmeal	1 70
38. Hollweg & Reese, queensware	1 54
39. Frank M. Dell, lime	1 50
40. Charles G. Grah, grinding clippers	50
41. Mary B. Ange, special nurse.....	65 00
42. Columbia Grocery Co., miscellaneous groceries.	6 35
43. Furnas Ice Cream Co., ice cream	1 60

Total bills allowed December 11, 1906.....

\$7,651 02

January 10, 1907—

44. R. O. Johnson, Supt., pay-roll, December, 1906..	\$4,218 54
45. R. O. Johnson, Supt., miscellaneous expenses ..	87 92
46. M. O'Connor & Co., groceries	401 75
47. Armour & Co., meats and butterine	283 38
48. Nelson Morris & Co., beef, smoked meats and lard	263 56
49. George T. Evans & Son, flour	156 10
50. J. L. Keach, fruits and vegetables	115 02
51. Indianapolis Poultry Co., poultry and eggs.....	103 61
52. Indianapolis Gas Co., gas	81 90
53. Pettis Dry Good Co., miscellaneous dry goods..	81 16
54. J. C. Perry & Co., grocers' sundries	76 77
55. M. C. Hunt, soap chips	71 12
56. The Nichols Candy Co., candies	68 75
57. Daniel Stewart Co., drugs	57 83
58. John O'Neill, provender and corn meal.....	50 25
59. Hibben, Hollweg & Co., misc. dry goods.....	45 66
60. Huntington & Page, evergreen, bulbs, etc.....	38 68
61. Hollweg & Reese, queensware	30 95
62. Indianapolis Book and Stationery Co., school sup- plies, etc.....	24 92
63. American Laundry Machinery Co., mangle sheets and felt	23 64
64. Century Biscuit Co., crackers	23 23
65. Coonse & Caylor Ice Co., ice	20 40
66. The Albert Gall Co., carpet, linoleum and shade	19 60
67. W. B. Peake & Co., groceries.....	13 10
68. A. Booth & Co., fish and oysters	12 63
69. The H. Leiber Co., art and school supplies.....	12 12
70. Vonnegut Hardware Co., miscellaneous hardware	10 85
71. Sander & Recker Co., commode	8 50
72. Christian Off & Co., soap kettle	8 00
73. Indiana Paper and Bag Co., paper and twine....	7 47
74. Columbia Grocery Co., miscellaneous groceries..	6 82
75. Thornton-Levey Co., school and office supplies..	6 50
76. The Royse Electric Co., electrician's supplies ..	6 08

EXHIBIT No. 7—Continued.

77.	Yule & Rodefelf, horse shoeing	\$6 00
78.	Indianapolis Light and Heat Co., electric light..	6 00
79.	Knight & Jillson Co., clamps, etc.....	5 55
80.	Badger Furniture Co., hanging lace curtains....	4 45
81.	W. W. Barnum & Co., cider	2 50
82.	Central Supply Co., steam gauges	2 50
83.	H. H. Bishop, marking silverware	2 50
84.	George J. Mayer, punch and receptacle.....	2 25
85.	Bash's Seed Store, bulbs	1 88
86.	George H. Mueller & Co., popcorn	1 75
87.	R. Kinklin, Santa Claus outfit	1 75
88.	C. P. Lesh Paper Co., paper	1 63
89.	Indianapolis Gas Co., gas heater	1 50
90.	William B. Burford, letter file on exchange.....	1 50
91.	Lilly & Stalnaker, corn popper	1 00
92.	Charles J. Gardner, meat	75

Total bills allowed January 10, 1907.....

\$6,480 32

February 7, 1907—

93.	R. O. Johnson, Supt., pay-roll, January, 1907....	\$4,218 54
94.	R. O. Johnson, Supt., miscellaneous expenses...	93 92
95.	H. B. Brown, trustee, salary and expenses.....	100 00
96.	W. W. Ross, trustee, salary and expenses	100 00
97.	W. P. Herron, trustee, salary and expenses....	90 50
98.	Indianapolis Coal Co., coal	1,023 18
99.	M. O'Connor & Co., groceries	411 56
100.	Armour & Co., meats and butterine	350 74
101.	Saks & Co., uniforms, etc.....	279 70
102.	Charles J. Gardner, meats	244 00
103.	John O'Neill, flour and provender	150 05
104.	J. L. Keach, fruits and vegetables	94 82
105.	Indianapolis Gas Co., gas	63 00
106.	J. R. Budd Co., poultry and eggs	59 31
107.	M. C. Hunt, soap chips	57 63
108.	Indianapolis Water Co., water service	50 00
109.	Hibben, Hollweg & Co., dry goods	46 43
110.	Daniel Stewart Co., drugs, etc.....	43 46
111.	American District Telegraph Co., box rental....	37 50
112.	Coonse & Caylor Ice Co., ice	27 90
113.	West Disinfecting Co., machine rental	22 08
114.	Indiana Reformatory, brooms	21 09
115.	J. C. Perry & Co., cheese, etc.....	19 80
116.	W. B. Peake & Co., groceries.....	15 67
117.	Century Biscuit Co., crackers	16 79
118.	Indianapolis Book and Stationery Co., school sup- plies	14 59
119.	Hollweg & Reese, queensware	13 93
120.	Central Supply Co., engineer's supplies	11 25

EXHIBIT No. 7—Continued.

121.	A. Booth & Co., fish and oysters	\$11 23
122.	The A. Burdsal Co., glass and brushes	11 05
123.	Frank Bird Transfer Co., transportation	10 00
124.	Central Union Telephone Co., telephone rental...	10 00
125.	Indianapolis Telephone Co., telephone rental ...	10 00
126.	Indianapolis Light and Heat Co., electric light..	7 57
127.	Vonnegut Hardware Co., miscellaneous hardware	7 45
128.	Yule & Rodefelf, horse shoeing	6 50
129.	Fracke Hardware Co., hardware, etc.....	6 63
130.	Kipp Bros. Co., chamois and combs	5 30
131.	Indiana Paper and Bag Co., envelopes	3 13
132.	Pettis Dry Goods Co., mop wringers	2 70
133.	Indianapolis News, subscription	2 60
134.	Indianapolis Star, subscription	2 60
135.	Brinkmeyer, Kuhn & Co., figs	1 47

Total bills allowed February 7, 1907.....

\$7,775 67

March 7, 1907—

136.	R. O. Johnson, Supt., pay-roll, February, 1907...	\$4,197 47
137.	R. O. Johnson, Supt., miscellaneous expenses....	80 23
138.	Armour & Co., meats, lard and butterine.....	396 88
139.	J. C. Perry & Co., groceries	345 72
140.	Charles J. Gardner, meats	229 35
141.	Indianapolis Coal Co., lump coal	146 66
142.	George T. Evans & Son., flour	104 00
143.	Indianapolis Gas Co., gas	96 93
144.	J. L. Keach, fruits and vegetables	91 58
145.	M. O'Connor & Co., groceries	81 20
146.	J. R. Budd Co., poultry and eggs	66 81
147.	M. C. Hunt, soap chips	64 00
148.	Crescent Paper Co., toilet paper	50 00
149.	Hibben, Hollweg & Co., miscellaneous dry goods	44 21
150.	John O'Neill, provender	31 50
151.	The A. Kiefer Drug C., drugs.....	26 89
152.	Century Biscuit Co., crackers	21 34
153.	Coonse & Caylor Ice Co., ice	18 15
154.	Standard Oil Co., oils	17 18
155.	A. Booth & Co., fish and oysters	14 76
156.	Badger Furniture Co., madras	14 50
157.	Huntington & Page, seeds, etc.....	14 20
158.	W. B. Peake & Co., miscellaneous groceries	11 21
159.	Indianapolis Book and Stationery Co., school sup- plies	10 95
160.	The H. Lieber Co., art supplies	8 58
161.	Columbia Grocery Co., groceries	7 80
162.	Indianapolis Light and Heat Co., electric light..	7 72
163.	Indiana Paper and Bag Co., paper.....	5 75
164.	C. P. Lesh Paper Co., paper	4 95

EXHIBIT No. 7—Continued.

165.	T. B. Laycock Mfg. Co., casters	\$4 17
166.	Knight & Jillson Co., engineer's supplies	3 65
167.	Cain & Llewellyn, medicine	2 50
168.	Webster E. Dietz, corn meal	1 70
169.	The Albert Gall Co., window shades	1 45
170.	Furnas Ice Cream Co., eggnog	1 30
171.	C. W. Meikel Co., mantle, chimney and tubing..	1 10
172.	Daniel Stewart Co., drugs	1 00
173.	Charles Mayer & Co., silver polish	75
174.	Bressette-Dugan Co., surgeon's knife.....	75
175.	Francke Hardware Co., hardware	57
176.	Utten E. Read, eggs	4 50

Total bills allowed March 7, 1908.....

\$6,233 96

April 9, 1907—

177.	R. O. Johnson, Supt., pay-roll, March, 1907.....	\$4,217 46
178.	R. O. Johnson, Supt., miscellaneous expenses	77 28
179.	Indianapolis Coal Co., coal	759 65
180.	M. O'Connor & Co., groceries	438 29
181.	Armour & Co., meats, lard and butterine	330 10
182.	Nelson, Morris & Co., fresh beef	216 05
183.	J. L. Keach, fruits and vegetables	110 86
184.	John O'Neill, flour	101 40
185.	Indianapolis Gas Co., gas	76 41
186.	M. C. Hunt, soap chips.....	67 77
187.	J. R. Budd Co., poultry and eggs.....	56 46
188.	Vawter Hay and Grain Co., provender	50 50
189.	Daniel Stewart Co., drugs	44 28
190.	Coonse & Caylor Ice Co., ice	35 33
191.	Indianapolis Poultry Co., eggs	30 00
192.	Indianapolis Book and Stationery Co., school sup- plies	27 93
193.	J. C. Perry & Co., cheese and sugar	22 36
194.	W. B. Peake & Co., groceries	19 41
195.	National Biscuit Co., crackers	18 78
196.	The H. Lieber Co., art supplies	18 70
197.	Huntington & Page, seeds, etc.....	16 70
198.	Charles D. Pearson & Co., queensware	14 85
199.	A. Booth & Co., fish and oysters	13 18
200.	Columbia Grocery Co., groceries	10 50
201.	Charles J. Gardner, fresh meat and liver	9 30
202.	Indianapolis Light and Heat Co., electric light.	8 40
203.	Vonnegut Hardware Co., miscellaneous hardware	8 30
204.	Taylor Belting Co., electrician's supplies	7 62
205.	Crescent Oil Co., dynamo oil	7 50
206.	Hibben, Hollweg & Co., miscellaneous dry goods.	6 29
207.	R. L. Polk Co., city directory	6 00
208.	C. W. Meikel Co., electrical supplies	4 73

EXHIBIT No. 7—Continued.

209.	Yule & Rodefald, horse shoeing	\$3 00
210.	Utten E. Read, eggs	2 60
211.	Cain & Llewellyn, drugs	2 60
212.	Techinten & Freiberg, stable supplies	2 50
213.	Tiona Refining Co., floor oil.....	2 00
214.	William H. Armstrong, infirmiry appliances	1 78
215.	Webster E. Dietz, corn meal	1 60
216.	Lilly & Stalnaker, sea grass cloth	1 60
217.	The Royse Electric Co., electrician's supplies ..	1 60
218.	The A. Burdsal Co., whitewash brushes.....	1 50
219.	Thornton-Levey Co., typewriter ribbon and clay	1 50
220.	C. P. Lesh Paper Co., paper	1 49
221.	Central Supply Co., strainers for trap	1 25
222.	Schweikle & Prange, wrench and pump iron	1 15
223.	Kipp Bros. Co., brush and trays	1 05
224.	Standard Oil Co., floor oil	1 00
Total bills allowed April 9, 1907.....		\$6,861 61
May 8, 1907—		
225.	R. O. Johnson, Supt., pay-roll, April, 1907.....	\$4,025 86
226.	R. O. Johnson, Supt., miscellaneous expenses....	102 67
227.	R. O. Johnson, Supt., pupils' expenses	54 33
228.	H. B. Brown, trustee, salary and expenses	100 00
229.	W. W. Ross, trustee, salary and expenses	100 00
230.	W. P. Herron, trustee, salary and expenses....	93 60
231.	Ele Stansbury, trustee, salary and expenses.....	30 50
232.	Indianapolis Coal Co., coal and wood	991 68
233.	M. O'Connor & Co., groceries	398 06
234.	Armour & Co., meats, lard and butterine.....	300 98
235.	Morris & Co., fresh meats	246 01
236.	John O'Neill, flour and corn meal	154 90
237.	J. L. Keach, fruits and vegetables	102 62
238.	Vawter Hay and Grain Co., provender	91 36
239.	Indianapolis Gas Co., gas and tubing	77 80
240.	Hibben, Hollweg & Co., miscellaneous dry goods.	67 04
241.	William B. Burford, printing, etc.....	65 76
242.	Indianapolis Poultry Co., eggs	62 40
243.	Daniel Stewart Co., drugs	58 57
244.	The Olds Soap Co., soap chips	52 82
245.	Indianapolis Water Co., water rental	50 00
246.	Pettis Dry Goods Co., miscellaneous dry goods ..	43 81
247.	Coonse & Caylor Ice Co., ice	39 75
248.	J. R. Budd Co., poultry	37 84
249.	American District Telegraph Co., watchman's service	37 50
250.	Indiana Reformatory, brooms	23 42
251.	J. C. Perry & Co., cheese and sugar	22 04
252.	West Disinfecting Co., machine rentals	21 36

EXHIBIT No. 7—Continued.

253.	C. P. Lesh Paper Co., paper and art supplies	\$20 42
254.	W. B. Peake & Co., groceries	18 64
255.	National Biscuit Co., crackers	17 73
256.	Hollweg & Reese, queensware	17 56
257.	Knight & Jillson Co., engineer's supplies	15 05
258.	Indianapolis Telephone Co., telephone rental....	10 67
259.	Independent Fish and Oyster Co., fish and oysters	10 04
260.	Central Union Telephone Co., telephone rentals	10 00
261.	Bressette-Dugan Co., bracket	10 00
262.	Indianapolis Novelty Works, lawn mowers sharpened	9 00
263.	Indpls. Book and Stationery Co., school and of- fice supplies	7 75
264.	Ottenheimer & Co., napkins	6 60
265.	The H. Leiber Co., art supplies.....	6 12
266.	Indpls. Light and Heat Co., electric light.....	5 93
267.	M. C. Hunt, caustic soda	5 95
268.	Christian Off & Co., frying and sauce pans....	5 10
269.	Columbia Grocery Co., miscellaneous groceries..	4 85
270.	Vonnegut Hardware Co., hardware, etc.....	4 30
271.	Utten E. Read, eggs.....	3 20
272.	Henry Frommeyer, queensware	3 00
273.	Indianapolis News, subscription	2 60
274.	Indianapolis Star, subscription	2 60
275.	Huntington and Page, seeds and moss.....	2 50
276.	Indiana Paper and Bag Co., art supplies.....	2 40
277.	Herrington Light Co., gas mantles	1 80
278.	Charles Mayer & Co., polish	1 50
279.	Royse Electric Co., electrician's supplies.....	1 36
280.	Furnas Ice Cream Co., ice cream	1 00
281.	Yule & Rodfeld, horse shoeing	1 00
282.	Charles J. Gardner, lamb chops	50
Total bills allowed May 8, 1907.....		\$7,661 85
June 12, 1907.		
283.	R. O. Johnson, Supt., pay-roll May, 1907.....	\$4,114 68
284.	R. O. Johnson, Supt., miscellaneous expenses....	57 87
285.	Morris & Co., fresh and smoked meats and lard..	422 29
286.	J. C. Perry & Co., groceries	288 23
287.	Armour & Co., butterine	150 00
288.	J. L. Keach, fruits and vegetables.....	144 72
289.	John O'Neill, flour	110 50
290.	J. R. Budd Co., poultry and eggs	100 89
291.	Mary F. Ange, special nurse.....	80 00
292.	Indianapolis Gas Co., gas	79 83
293.	M. O'Connor & Co., grocers' sundries	77 65
294.	M. C. Hunt, soap chips	65 57
295.	Coonse & Caylor Ice Co., ice	49 05

EXHIBIT No. 7—Continued.

296.	Daniel Stewart Co., drugs	\$45 57
297.	Flanner & Buchanan, acc't. Clara Miller	44 55
208.	Indianapolis Book and Stationery Co., Bibles and school supplies	32 97
299.	Frank E. Janes, provender	31 76
300.	Knight & Jillson Co., hose, etc.	25 90
301.	William B. Burford, applications for admissions	24 60
302.	National Biscuit Co., crackers	21 22
303.	Indiana Paper and Bag Co., miscellaneous paper and envelopes	20 70
304.	C. P. Lesh Paper Co., miscellaneous paper.....	17 94
305.	Columbia Grocery Co., groceries	17 38
306.	W. B. Peake & Co., groceries	15 98
307.	American Dairy Co., cheese	13 50
308.	Hollweg & Reese, queensware	11 55
309.	A. Booth & Co., fish.....	8 91
310.	American Laundry Machinery Co., mangle muslins.....	7 98
311.	Vonnegut Hardware Co., misc. hardware.....	7 91
312.	Indpls. Light and Heat Co., electric light.....	7 27
313.	The Bobbs-Merrill Co., books	7 00
314.	Pettis Dry Goods Co., misc. kitchenware.....	5 70
315.	Nutz & Grosskopf, shoe strings.....	5 60
316.	Huntington & Page, moss	3 50
317.	Francke Hardware Co., misc hardware	3 50
318.	Hibben, Hollweg & Co., ribbon, hose, etc.....	3 02
319.	Kipp Bros. & Co., toothpicks.....	1 60
320.	Utten E. Read, eggs	1 60
321.	Charles J. Gardner, fresh meats	1 70
322.	The H. Leiber Co., art supplies	1 51
323.	Yule & Rodefelf, horse shoeing	1 50
324.	Furnas Ice Cream Co., ice cream	1 25
325.	Lewis & S. A. Matill, underwear.....	1 20
326.	Joseph Gardner, milk strainer	85
327.	The A. Burdsal Co., butchers' wax.....	80

Total bills allowed June 12, 1907.....

\$6,137 30

June 28, 1907—

328.	R. O. Johnson, Supt., pay-roll, June, 1907.....	\$2,774 63
329.	R. O. Johnson, Supt., misc. expenses.....	77 08
330.	H. T. Hearsey Vehicle Co., depot wagon, etc.....	329 75
331.	Saks & Co., uniforms, etc.....	225 07
332.	J. C. Perry & Co., groceries	186 76
333.	Charles J. Gardner, fresh meats	116 28
334.	Morris & Co., smoked meats and lard.....	102 05
335.	J. R. Budd Co., poultry and eggs	77 66
336.	Indianapolis Gas Co., gas	72 00
337.	J. L. Keach, fruits and vegetables	65 80

EXHIBIT No. 7—Continued.

338.	Américan Dairy Co., butterine and cheese.....	\$55 40
339.	Indianapolis Coal Co., wood, etc.	50 85
340.	John O'Neill, flour	49 10
341.	Olds Soap Co., soap chips	48 74
342.	Coonse & Caylor Ice Co., ice	36 15
343.	Vawter Hay and Grain Co., provender.....	34 00
344.	Advance Tent and Awning Co., awnings.....	24 55
345.	Hibben, Hollweg & Co., misc. dry goods.....	21 24
346.	Armour & Co., fresh meats	19 69
347.	Knight & Jillson Co., engineer's supplies	19 11
348.	W. B. Peake & Co., groceries	18 82
349.	Indianapolis Poultry Co., eggs	18 00
350.	Frank Bird Transfer Co., four carriages.....	16 00
351.	Central Supply Co., engineer's supplies	15 41
352.	L. A. Greiner & Sons, veterinary services.....	15 00
353.	Furnas Ice Cream Co., ice cream	12 90
354.	Charles T. Bretzman, photos	10 00
355.	Christian Off & Co., copper box and coffee can....	8 60
356.	Indpls. Light and Heat Co., electric light.....	7 80
357.	Charles Mayer & Co., lawn swing.....	7 50
358.	Daniel Stewart Co., alcohol, etc.	6 30
359.	Vonnegut Hardware Co., misc. hardware.....	6 30
360.	Independent Fish and Oyster Co., fish.....	5 40
361.	National Biscuit Co., crackers	4 85
362.	L. E. Morrison & Co., trunk	3 00
363.	Pettis Dry Goods Co., ribbon and cloth.....	2 31
364.	Indpls. Book and Stationery Co., pencils, etc....	2 06
365.	H. Wiegand & Son, rental of flowers.....	2 00
366.	Indpls. Novelty Works, lawn mowers.....	1 25
367.	George J. Mayer, recut seal	1 00
368.	Columbia Grocery Co., apples	1 00
Total bills allowed June 28, 1907.....		\$4,550 81
August 13, 1907—		
369.	R. O. Johnson, Supt., pay-roll July, 1907.....	\$1,360 38
370.	R. O. Johnson, Supt., misc. expenses	30 59
371.	H. B. Brown, trustee, salary and expenses.....	106 25
372.	W. W. Ross, trustee, salary and expenses.....	106 25
373.	W. P. Herron, trustee, salary and expenses.....	90 50
374.	Ele Stansbury, trustee, salary and expenses.....	102 00
375.	Indianapolis Coal Co., coal.....	219 00
376.	Henry Harding, horse	200 00
377.	The Albert Gall Co., papering, matting, curtains, etc.....	124 69
378.	Charles J. Gardner, fresh meats	95 19
379.	J. L. Keach, fruits and vegetables.....	85 32
380.	J. C. Perry & Co., groceries	84 08
381.	Coonse & Caylor Ice Co., ice.....	76 80

EXHIBIT No. 7—Continued.

382.	William B. Burford, diplomas, etc.....	\$54 30
383.	Indianapolis Gas Co., gas	54 27
384.	Indianapolis Water Co., water rental.....	50 00
385.	Armour & Co., smoked meats and lard.....	44 93
386.	American District Telegraph Co., box rentals....	37 50
387.	J. R. Budd Co., poultry and eggs.....	36 75
388.	W. B. Peake & Co., groceries	36 64
389.	M. O'Connor & Co., grocers' sundries.....	29 75
390.	Knight & Jillson Co., engineer's supplies.....	29 07
391.	American Dairy Co., butterine	20 00
392.	Vawter Hay and Grain Co., provender.....	18 60
393.	Standard Oil Co., oil and gasoline	17 98
394.	Indianapolis Telephone Co., telephone rental....	16 00
395.	West Disinfecting Co., rental of machines.....	15 36
396.	Indpls. Light and Heat Co., electric light.....	15 30
397.	Daniel Stewart Co., drugs and boiler compound..	14 89
398.	Hibben, Hollweg & Co., brown muslin.....	10 90
399.	Central Union Telephone Co., telephone rental...	10 00
400.	Indianapolis News, newspaper and advt.....	9 32
401.	C. P. Lesh Paper Co., paper.....	8 83
402.	Indianapolis Star, newspaper and advt.....	8 75
403.	L. A. Greiner & Sons, veterinary services.....	8 00
404.	Vondersaar & Co., fruits	5 75
405.	Indianapolis Poultry Co., poultry and eggs.....	5 70
406.	Utten E. Read, eggs	4 50
407.	Indianapolis Basket Co., clothes baskets.....	4 50
408.	Kipp Bros. Co., feather dusters and sponges....	3 00
409.	Techentin & Freiberg, chamois skins, dusters, etc.	2 80
410.	Yule & Rodenfeld, horse shoeing.....	2 00
411.	Hollweg & Reese, queensware	1 85
412.	Century Biscuit Co., reception flakes.....	1 52
413.	Furnas Ice Cream Co., ice cream	1 50
414.	White River Sand and Gravel Co., sand.....	1 50
415.	W. W. Barnum & Co., vinegar.....	1 25
416.	Thornton-Levey Co., envelopes and seals.....	85
417.	The John Van Range Co., stove top.....	15 31
Total bills allowed August 13, 1907.....		\$3,280 22
September 9, 1907—		
418.	R. O. Johnson, Supt., pay-roll August, 1907.....	\$1,355 00
419.	R. O. Johnson, Supt., misc. expenses	29 63
420.	Enoch Metzger, rebuilding boiler walls.....	310 00
421.	William B. Burford, annual reports, etc.....	193 75
422.	Charles J. Gardner, beef and pork	109 40
423.	J. C. Perry & Co., groceries	95 73
424.	Indianapolis Coal Co., coal	87 36
425.	Coonse & Caylor Ice Co., ice.....	65 40
426.	Indianapolis Gas Co., gas	53 10

EXHIBIT No. 7—Continued.

427.	Armour & Co., hams, lard and butterine.....	\$52 10
428.	Indianapolis Poultry Co., poultry and eggs.....	37 74
429.	George Hitz & Co., fruits and vegetables.....	28 90
430.	Daniel Stewart Co., lead, varnish, turpentine, etc.	28 10
431.	W. B. Peake & Co., groceries.....	27 89
432.	Knight & Jillson Co., engineer's supplies.....	27 24
433.	P. W. Kennedy, repairs to breeching.....	27 00
434.	The Olds Soap Co., soap chips.....	26 60
435.	The Albert Gall Co., linoleum, matting, etc.....	22 50
436.	Indianapolis Light and Heat Co., electric light...	17 48
437.	Hibben, Hollweg & Co., flannel and crash.....	16 66
438.	Vawter Hay and Grain Co., provender	16 50
439.	Sanborn-Marsh Electric Co., fan and phone bracket.....	14 50
440.	Tiona Refining Co., floor oil, tank, etc.....	12 42
441.	Vonnegut Hardware Co., sad irons and sash cord	11 58
442.	The A. Burdsal Co., paints.....	9 10
443.	Vondersaar & Co., fruits and vegetables.....	8 03
444.	Columbia Grocery Co., misc. groceries.....	6 12
445.	A. Booth & Co., fish.....	5 31
446.	Century Biscuit Co., reception flakes.....	2 49
447.	J. L. Keach, fruits and vegetables.....	2 25
448.	Furnas Ice Cream Co., ice cream.....	1 80
449.	Yule & Rodenfeld, horse shoeing	1 75
450.	W. W. Barnum & Co., vinegar.....	1 25
Total bills allowed September 9, 1907.....		\$2,704 68
September 30, 1907—		
451.	R. O. Johnson, Supt., pay-roll September, 1907...	\$1,491 71
452.	R. O. Johnson, Supt., misc. expenses.....	2 91
453.	H. B. Brown, Trustee, salary and expenses.....	70 83
454.	Ele Stansbury, Trustee, salary and expenses.....	65 00
455.	W. W. Ross, Trustee, salary and expenses.....	70 83
456.	W. P. Herron, Trustee, salary and expenses....	64 40
457.	Indianapolis Coal Co., coal.....	668 69
458.	R. Harry Mills, cord wood.....	402 00
459.	J. C. Perry & Co., groceries	265 22
460.	The Taylor Carpet Co., carpets and matting....	189 94
461.	Charles J. Gardner, fresh beef.....	150 81
462.	The Albert Gall Co., carpets, shades and papering	102 40
463.	Armour & Co., smoked meats and butterine....	95 70
464.	Puritan Bed Spring Co., mattresses.....	87 36
465.	Indianapolis Book and Stationery Co., school supplies	84 87
466.	Indianapolis Water Co., water and hydrant rental	79 17
467.	Knight & Jillson Co., engineer's supplies.....	70 54
468.	John O'Neill, flour	67 55
469.	Sander & Recker Co., furniture	66 25

EXHIBIT No. 7—Continued.

470.	American Annals of the Deaf, subscriptions....	\$66 00
471.	Frank E. Janes, provender	62 28
472.	Indianapolis Gas Co., gas.....	57 51
473.	Hibben, Hollweg & Co., misc. dry goods.....	53 58
474.	J. L. Keach, fruits and vegetables	49 80
475.	Varney Electrical Supply Co., lamps and supplies	38 32
476.	Coonse & Caylor Ice Co., ice	35 40
477.	Levey Bros. & Co., books.....	29 00
478.	Olds Soap Co., soap chips	28 49
479.	Christian Off & Co., smokestack and tinware....	28 10
480.	American District Telegraph Co., box rental.....	25 00
481.	C. P. Lesh Paper Co., paper	23 75
482.	Pearl Street Produce Co., poultry and eggs	20 73
483.	Indianapolis Light and Heat Co., electric light...	20 48
484.	W. B. Peake & Co., misc. groceries	17 46
485.	Indianapolis Rug Factory, rugs.....	19 85
486.	Hollweg & Reese, queensware	14 55
487.	Badger Furniture Co., window curtains.....	13 50
488.	Indianapolis Telephone Co., telephones.....	12 46
489.	Baur & Smith, carnations	12 00
490.	Standard Oil Co., coal oil, gasoline and turpentine	9 60
491.	Kipp Bros. Co., dusters and chamois skins.....	9 25
492.	John W. Robinson, grate bars.....	9 24
493.	Central Union Telephone Co., telephone rental...	8 31
494.	West Disinfecting Co., machine rental.....	7 04
495.	William B. Burford, register	6 50
496.	The Hygiene Chemical Co., cleaner polish.....	6 10
497.	Tanner & Co., tinware	5 04
498.	National Biscuit Co., bread	4 36
499.	Yule & Rodefelf, horse shoeing.....	3 00
500.	Indianapolis Star, subscription	2 60
501.	National Biscuit Co. crackers	2 00
502.	A. Booth & Co., fish.....	1 80
503.	Indianapolis News, subscriptions	1 75
504.	Techentin & Frieberg, horse collar.....	1 50
505.	Daniel Stewart Co., corks	1 49
506.	Oliver Typewriter Agency, typewriter ribbons...	1 20
507.	The Albert Gall Co., drugget and rugs.....	44 50

Total bills allowed September 30, 1907.....

\$4 849 72

EXHIBIT No. 8.

A SCHEDULE OF ALL ORDERS DRAWN ON THE TREASURER OF THE INSTITUTION BY BOARD OF TRUSTEES THEREOF, AND PAID BY SAID TREASURER, ACCOUNT CURRENT REPAIRS, DURING FISCAL YEAR (ELEVEN MONTHS) ENDING SEPT. 30. 1907. ORIGINAL VOUCHERS IN ITEMIZED FORM, SUBSCRIBED AND SWORN TO BY CLAIMANTS, ON FILE IN OFFICE OF AUDITOR OF STATE. DUPLICATES ON FILE IN OFFICE OF INSTITUTION.

December 11, 1906—

1. Christian Off & Co., tinwork.....	\$2 75	
2. Kirkhoff Bros. & Co., plumbing.....	1 30	
		<hr/>
Total bills allowed December 11, 1906.....		\$4 05

January 10, 1907—

3. Christian Off & Co., repairs in kitchen.....	\$2 28	
		<hr/>
Total bills allowed January 10, 1907.....		\$2 28

February 7, 1907—

4. Donahue Bros., boiler repairs	\$117 05	
5. Kirkhoff Bros. & Co., plumbing	14 88	
6. National Boiler and Iron Works, boiler repairs..	9 85	
7. Christian Off & Co., pipe in shoe shop.....	7 54	
8. D. V. Reedy & Co., repairs to elevator.....	5 65	
		<hr/>
Total bills allowed February 7, 1907.....		\$154 97

March 7, 1907—

9. P. W. Kennedy, boiler repairs	\$63 00	
10. Christian Off & Co., repairs to washing machine	30 00	
11. Kirkhoff Bros. & Co., plumbing	15 61	
12. Frank M. Dell, lime	1 50	
		<hr/>
Total bills allowed March 7, 1907.....		\$110 11

April 9, 1907—

13. Kirkhoff Bros. & Co., plumbing.....	\$37 92	
14. Christian Off & Co., repairs to steam table.....	10 00	
15. Frank M. Dell, lime and cement.....	3 55	
		<hr/>
Total bills allowed April 9, 1907.....		\$51 47

EXHIBIT No. 8—Continued.

May 8, 1907—

16. Frank C. Butts, repairs to well	\$57 00
17. Coburn Timber Co., lumber	52 00
18. P. W. Kennedy, patch on boiler	45 00
19. Sargent Paint and Color Co., glass and paint....	29 40
20. Christian Off & Co., skylight, etc.....	9 53
21. Vonnegut Hardware Co., hardware	5 95
22. Kirkhoff Bros. & Co., plumbing	5 02
23. Frank M. Dell, fire clay.....	2 00

Total bills allowed May 8, 1907..... \$205 90

June 12, 1907—

24. Kirkhoff Bros. & Co., plumbing.....	\$9 70
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Total bills allowed June 12, 1907..... \$9 70

June 28, 1907—

25. Benjamin Irvin, whitewashing.....	\$99 50
26. Balke & Krauss Co., lumber	67 48
27. Mullen & Patton, plastering	31 10
28. Vonnegut Hardware Co., hardware	26 85
29. Sargent Paint and Color Co., paints, oils etc....	25 35

Total bills allowed June 28, 1907..... \$250 28

August 13, 1907—

30. Christian Off & Co., repairs to tinwork, etc.....	\$46 14
31. Daniel Stewart Co., paints and glass.....	26 75
32. Advance Paint Co., paint	24 00
33. Balke & Krauss Co., column	3 00

Total bills allowed August 13, 1907..... \$99 89

September 9, 1907—

34. Daniel Stewart Co., paints, glass, oils, etc.....	\$21 69
35. Indianapolis Novelty Works, repairs to lawn mowers	2 25
36. The A. Burdsal Co., heat resisting liquid.....	2 00
37. Vonnegut Hardware Co., cleaners and tacks.....	1 20
38. Frank M. Dell, cement	65

Total bills allowed September 9, 1907..... \$27 79

EXHIBIT No. 9.

A SCHEDULE OF ALL ORDERS DRAWN ON THE TREASURER OF THE INSTITUTION BY BOARD OF TRUSTEES THEREOF, AND PAID BY SAID TREASURER, ACCOUNT INDUSTRIES, DURING FISCAL YEAR (ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907. ORIGINAL VOUCHERS IN ITEMIZED FORM, SUBSCRIBED AND SWORN TO BY CLAIMANTS, ON FILE IN OFFICE OF AUDITOR OF STATE. DUPLICATES ON FILE IN OFFICE OF INSTITUTION.

December 11, 1906—

1. R. O. Johnson, Supt., pay-roll November, 1906...	\$242 67
2. R. O. Johnson, Supt., misc. expenses	3 36
3. Nutz & Grosskopf, shoe shop supplies	68 53
4. Pettis Dry Goods Co., linen	4 32
5. Hibben, Hollweg & Co., buttons and thread.....	3 08
6. Francke Hardware Co., saws and hooks.....	2 75
7. C. P. Lesh Paper Co., ink and paper.....	1 45
8. William Hagerhorst, machine belt and needles..	1 40
9. Paragon Safety Oil Co., gasoline	80
10. Remington Typewriter Co., typewriter ribbon....	75

Total bills allowed December 11, 1906.....	\$329 11
--	----------

January 10, 1907—

11. R. O. Johnson, Supt., pay-roll December, 1907...	\$242 67
12. R. O. Johnson, Supt. misc. expenses.....	1 87
13. Taylor Belting Co., shoe shop supplies.....	77 96
14. Hibben, Hollweg & Co., thimbles and buttons...	5 20
15. Pettis Dry Goods Co., thread.....	4 00
16. The Home Stove Co., top for stove	1 40
17. Christian Off & Co., piece zinc.....	75

Total bills allowed January 10, 1907.....	\$333 85
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February 7, 1907—

18. R. O. Johnson, Supt. pay-roll January, 1907.....	\$242 67
19. R. O. Johnson, Supt., misc. expenses.....	12 71
20. Francke Hardware Co., cabinet shop.....	16 58
21. Printers' Roller and Supply Co., press rollers...	14 25
22. Hibben, Hollweg & Co., needles, cotton and thread	7 95
23. C. P. Lesh Paper Co., paper, etc.....	7 84
24. Central Machine Works, parts for printing press	2 35
25. William Laurie Co., cotton	1 44

Total bills allowed February 7, 1907.....	\$305 79
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EXHIBIT No. 9—Continued.

March 7, 1907—

26.	R. O. Johnson, Supt., pay-roll February, 1907...	\$242 67
27.	Taylor Belting Co., shoe shop supplies	63 50
28.	Francke Hardware Co., misc. hardware.....	13 81
29.	Hibben, Hollweg & Co., needles and thread.....	8 10
30.	Charles Mayer & Co., uniform buttons	2 50

Total bills allowed March 7, 1907..... \$330 58

April 9, 1907—

31.	R. O. Johnson, Supt., pay-roll March, 1907.....	\$242 67
32.	R. O. Johnson, Supt., misc. expenses.....	37 60
33.	Taylor Belting Co., shoe shop supplies.....	114 12
34.	Balke & Krauss Co., lumber	5 50
35.	Charles Mayer & Co., uniform buttons.....	4 12
36.	Paragon Safety Oil Co., gasoline	85

Total bills allowed April 9, 1907..... \$404 86

May 8, 1907—

37.	R. O. Johnson, Supt., pay-roll April, 1907.....	\$242 67
38.	Pettis Dry Goods Co., thread	4 00

Total bills allowed May 8, 1907..... \$246 67

June 12, 1907—

39.	R. O. Johnson, Supt, pay-roll May, 1907.....	\$242 67
40.	R. O. Johnson, Supt., misc. expenses	1 60
41.	Nutz & Grosskopf, shoe shop and sewing room...	131 65

Total bills allowed June 12, 1907..... \$375 92

June 28, 1907—

42.	R. O. Johnson, Supt., pay-roll June, 1907.....	\$209 59
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Total bills allowed June 28, 1907..... \$209 59

August 13, 1907—

43.	R. O. Johnson, Supt., pay-roll July, 1907.....	\$86 50
44.	R. O. Johnson, Supt., misc. expenses.....	3 85

Total bills allowed August 13, 1907..... \$90 35

September 9, 1907—

45.	R. O. Johnson, Supt., pay-roll August, 1907.....	\$86 50
-----	--	---------

Total bills allowed September 9, 1907..... \$86 50

EXHIBIT No. 9—Continued.

September 30, 1907—

46. R. O. Johnson, Supt., pay-roll September, 1907...	\$131 50
47. Hide, Leather and Belting Co., shoe shop supplies	304 94
48. Long-Knight Lumber Co., lumber	180 25
49. American Type Founders Co., type.....	105 78
50. Crescent Paper Co., misc. paper	98 57
51. Francke Hardware Co., misc. hardware.....	62 57
52. Oliver Typewriter Agency, No. 5 typewriter.....	62 50
53. Daniel Stewart Co., paints, glass, oils, etc.....	44 17
54. Edward J. Hecker, outlines, etc.....	41 90
55. Indianapolis Book and Stationery Co., dictionary	9 25

Total bills allowed September 30, 1907.....	\$1,041 43
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EXHIBIT No. 10.

A RECAPITULATION OF CLOTHING ACCOUNTS, SHOWING THE AMOUNTS CHARGED TO COUNTIES FOR CLOTHING AND OTHER EXPENSES FOR THE PUPILS, PAID FOR FROM MAINTENANCE FUND FOR THE FISCAL YEAR (ELEVEN MONTHS) ENDING SEPTEMBER 30, 1907. ACCOUNTS FOR COLLECTION HAVE BEEN FILED WITH THE TREASURER OF STATE.

Adams	\$53 02
Allen	16 93
Carroll	2 38
Clark	13 78
Dearborn	16 29
Dekalb	11 61
Delaware	7 82
Dubois	38 92
Gibson	2 43
Grant	8 56
Greene	28 95
Hamilton	18 12
Harrison	2 46
Hendricks	12 92
Howard	45 22
Huntington	2 83
Jay	34 58
Johnson	23 85
Knox	19 33
Lake	2 85
Laporte	49 60
Madison	46 18

EXHIBIT No. 10—Continued.

Marion	\$122 78
Martin	27 76
Owen	18 44
Parke	10 93
Perry	1 63
Pike	64 31
Porter	10 85
Pulaski	5 74
Rush	11 02
Shelby	2 88
Tippecanoe	80 04
Vanderburgh	69 03
Vigo	28 16
Warrick	10 57
Total	\$922 77

EXHIBIT No. 11.

A RECAPITULATION OF INVENTORY OF ALL REAL AND PERSONAL PROPERTY BELONGING TO THE INDIANA STATE SCHOOL FOR THE DEAF, ON SEPTEMBER 30, 1907.

Art department	\$279 12
Bakeshop	206 71
Bedrooms and halls.....	2,230 68
Boiler house	3,443 86
Cabinet shop	1,313 74
Cooking class room.....	128 78
Dining rooms	1,316 36
Dormitories	3,613 35
Electric light plant.....	3,422 77
Farm and garden products.....	92 15
Green houses	660 46
Gymnasium	26 88
Infirmary	710 55
Kitchens	699 58
Laundry	1,386 88
Lavatories, bath rooms and water closets.....	2,231 37
Library	3,010 80
Live stock	540 00
Offices	773 20
Printing office	1,173 23
Real estate	825 00
Reception room and main hall.....	343 00

EXHIBIT No. 11—Continued.

Repair shop	\$546 40
School department	2,394 95
Sewing room	173 79
Shoe and harness shop.....	619 65
Stables	518 50
Steam heating apparatus.....	5,000 00
Store room	1,073 35
Tin shop	283 84
Tool house	171 85
Miscellaneous	687 70
Credit fund	1 00
<hr/>	
Total	\$39,899 50

THIRTY-SIXTH ANNUAL REPORT OF THE
BOARD OF TRUSTEES

OF THE

Indiana Industrial School for Girls

AND

The Indiana Womans Prison

FOR THE EIGHT AND ONE-HALF MONTHS
ENDING JULY 15, 1907

To the Governor

INDIANAPOLIS
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING
1908

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
February 14, 1908. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, February 14, 1908. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

FEBRUARY 20, 1908.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, February 20, 1908.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer February 20, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.

BOARD OF TRUSTEES.

INDIANA INDUSTRIAL SCHOOL FOR GIRLS.

EMMA LEE ELAM.....	Indianapolis, Ind.
ISABELLE J. BELL	Kokomo, Ind.
SARAH E. CAMPBELL.....	Anderson, Ind.
LOTTIE W. CALDWELL.....	Lafayette, Ind.

INDIANA WOMANS PRISON.

FANNY McKEE.....	Indianapolis, Ind.
ELLA B. McCOY.....	Indianapolis, Ind.
NETTIE A. WILSON.....	Lafayette, Ind.
ALICE WAUGH.....	Tipton, Ind.

OFFICERS AND EMPLOYES.

Superintendent,

EMILY E. RHOADES.

Margaret Dorwin	Assistant Superintendent
Emma Hart	Disburser
Malvina H. Aldrich.....	Matron, Prison
Kate Girdner	Kitchen Officer, Prison
Elizabeth Stevenson	Nurse
Mary McDougall	Laundry Matron, Prison
Nellie Wolfe	School Teacher
Elizabeth Underwood	School Teacher
Eva C. Jackson	School Teacher
Mary Allison	Industrial Teacher
Sara E. Smith	Industrial Teacher
Nellie Walters	Industrial Teacher
Armenia Lingo	Industrial Teacher
Ella Gerard	Industrial Teacher
Mrs. F. W. Brenman.....	Industrial Teacher
Ida B. Wood.....	Industrial Teacher
Evelyn Skelton	Industrial Teacher
Alma Harrison	Industrial Teacher
Edith Danner	Music
Laura May VanWie	Physical Culture
Nan B. Wood	State Agent
Emma L. Melemdy	Domestic Science

Physician,

MARTHA J. SMITH, M. D.

Secretary,

NELLIE JOHNSTON.

Employes,

Cyrus Cox	Engineer
John C. Cox	Gatekeeper
John A. Miller	Nightwatch
Wm. M. Brown	Fireman

REPORT OF THE BOARD OF TRUSTEES.

To the HON. J. FRANK HANLY, Governor of Indiana:

We submit the Thirty-sixth Annual Report of the Indiana Industrial School for Girls and the Indiana Womans Prison for the fiscal year ending September 30, 1907.

More than a third of a century of work for these joint institutions closed during the past year. There have been many changes during these years, but the work of the institutions has been carried on with the same care and regularity and with the steadfast intention of reformation of those committed, and we have reasonable assurance that, as a whole, the work has been a credit to the State.

April first, two Boards of Trustees were appointed, each consisting of four women. Those to take charge of the Indiana Girls School are: Mrs. Lottie W. Caldwell, one year; Mrs. Isabelle J. Bell, two years; Mrs. Sarah E. Campbell, three years; Mrs. Emma Lee Elam, four years. Those to take charge of the Indiana Womans Prison are: Mrs. Fanny McKee, Mrs. Ella B. McCoy, Mrs. Nettie A. Wilson, Mrs. Alice Waugh, each for four years. The appropriation for maintenance being for the joint institutions, the business from April first to August first was done by the two Boards of Trustees acting as one. Between July 10 and 17 the girls were moved to the new buildings erected by the Board of Commissioners appointed by the Governor for this purpose. This report is given in sections. The first to cover the eight and one-half months for the work of the joint institutions, and the other to cover the work of the Indiana Womans Prison for the two and one-half months of the eleven of the fiscal year. The Girls' School was more or less disturbed by the anticipation of going into the new home. The girls were restless and discipline was harder to maintain, but the various departments were carried on as usual and the girls made fair progress. The Superintendent's report will show in detail the different lines of work carried on in both institutions. The health of the family was remarkably good, considering the crowded condition of the old building. During the year three deaths have occurred in the School and one death in the Prison.

We have had one agent busy all the year, placing and visiting girls and women. Forty girls have been placed in families; seventy-four have been returned to their homes. Twenty-six have been returned as not doing well, showing about seventy-five per cent. doing well.

Number of girls present November 1, 1905.....	260
Number received on commitment	56
Number received from ticket-of-leave	26
<hr/>	
Total received during the 8½ months.....	82
Number released on ticket-of-leave	114
Number released on final discharge	1
Number died	3
Number escaped and not returned.....	12
<hr/>	
Total number released during 8½ months.....	130
Total number enrolled July 17, 1907.....	212

The Board of Trustees has estimated and determined the actual expense per annum of subsisting an infant committed to the Industrial School as required by Burns' R. S. 1901, section 8281, at \$159.44. The counties from which the girls come pay one-half of this amount into the State Treasury.

Income for the eight and one-half months for the Industrial School was \$5.60 on account of sewing.

INDIANA WOMANS PRISON.

Work in this department of the institution has been very satisfactory. The various industries have yielded a fair income to the State, besides furnishing employment and discipline for the women.

The indeterminate sentence law, permitting women to be paroled at the end of the minimum sentence, has in most cases worked well. The total number paroled during the eight and one-half months was twenty. Of these three have been returned for violating their parole. The hope that this law gives the prisoners works great good in the discipline of the prison, and the restraint placed upon them after being paroled is salutary. Many students of criminology believe it would be better to continue the State care until the end of the maximum sentence, or at least that the Board of Parole have the power of discrimination in the matter of discharge. In

many cases the oversight of the State would greatly benefit a prisoner for a longer time than one year before final discharge.

Number of women enrolled November 1, 1906.....	52
Received on commitment.....	11
Returned from parole.....	3

Total	14
Discharged and paroled.....	18
Died	1
Pardoned	1

Total	20
Remaining July 17, 1907.....	46

Income from Womans Prison:

Laundry	\$725 24
Sewing	225 91
Miscellaneous	185 85
Total	\$1,137 00

All supplies, as far as practicable, have been bought upon competitive bid, and have given satisfaction.

The last General Assembly, in making the appropriation for maintenance, failed to give a per capita allowance for excess of numbers over two hundred and thirty-five inmates each month, and living expenses having been high our maintenance appropriation was exhausted at the end of the eighth month and we were obliged to ask that our bills for two months, amounting to \$2,158.24, be paid by the Governor from his emergency fund, which was done. For a more detailed report of the work done in these institutions, we submit the reports of the Superintendent, Secretary and Physician.

FINANCIAL STATEMENT.

For the Fiscal Year Ending September 30, 1907, Including Both Institutions.

Total appropriations, including specifics, and adding farm products (farm products, \$342.42).....	\$45,037 17
Unused appropriations	31 80

We have returned the unused appropriations, and all our earnings, making totals as follows:

Unused appropriations	\$31 80
Income Industrial School.....	\$5 60
Income Womans Prison.....	1,367 45
Miscellaneous earnings	196 90
<hr/>	
Total	\$1,569 95
Making to the credit of the institutions (unused appropriations and earnings).....	\$1,601 75

We are under obligations to the Governor and other State officers and many friends, for their support and sympathetic assistance in carrying on this work during the year.

Respectfully submitted,

EMMA LEE ELAM,
ISABELLE J. BELL,
LOTTIE W. CALDWELL,
SARAH E. CAMPBELL,
FANNY MCKEE,
ELLA B. MCCOY,
ALICE E. WAUGH,
NETTIE A. WILSON.

SUPERINTENDENT'S REPORT.

Ladies:

I respectfully submit to you for your consideration my report of the Indiana Industrial School for Girls and the Indiana Womans Prison for the period of eight and one-half months ending July 17, 1907.

In the Industrial School we began the year with a population of two hundred and sixty, and received on commitment fifty-six girls. Our population at the end of the period, July 17, 1907, was two hundred twelve.

On July 11th the first girls were removed to the new school near Clermont, Indiana, and by the 17th of the month all were taken away, with the exception of one of the girls, who stayed for a few weeks.

THE SCHOOLS.

Our graded schools are in good condition, satisfactory work having been done during the past year. Three teachers are employed from September to June. The course of instruction covers nine grades and follows the State course as far as practicable. As a result of the year's work, ten girls successfully passed the examination given by the County Superintendent and were awarded certificates. The class in shorthand and typewriting has done fairly well.

In addition to the regular school work, the girls are given the advantage of training in the industrial departments of the institution, thus making it possible for them to find employment when they leave the school. The following industries are taught: Cooking, household work, laundry work, dressmaking, caning, and needle work.

Much attention has been paid to work in our musical department, with good results. Individual instruction is given in piano and voice. A band and orchestra are both maintained, composed entirely of the girls.

Our classes in physical culture have been in the hands of a very efficient teacher. The Swedish System was introduced and good work accomplished. Each girl is given the advantage of at least thirty minutes a day in this department.

Each of the holidays of the year has been observed in a pleasant and profitable manner. Indoor and outdoor games are engaged in by the girls, and all have the advantage of a good library. During the summer months the girls are employed in the yard, cutting the grass and attending to the flower beds.

THE FURLOUGH SYSTEM.

This system is to be commended, and every effort is put forth to place the girls in good homes in various parts of the State as rapidly as they are ready to leave the institution. Great care is taken in selecting homes where the girls will be under good discipline and encouraged to make use of all opportunities for development.

During the period of this report one hundred fifteen girls were placed in homes. A few have been returned on account of bad conduct, but the majority are doing well. Three deaths have occurred during the year.

PENAL DEPARTMENT.

In this department we have at this date, July 17, 1907, forty-six women.

The year opened with women enrolled.....	52
Received up to July 17th.....	11
Returned from parole.....	3
<hr/>	
Total	66
Discharged and paroled	20
<hr/>	
Remaining July 17, 1907.....	46

Of the forty-six remaining, nine are sentenced for life.

Laundry work is the principal occupation of the women, work being sent in by families in the city. The work for the officers and the clothing of the prisoners is laundered in this department. The proceeds from this work for the eight and one-half months amounted to \$725.24. The earnings from the sewing-room, where plain sewing and quilting are done, were \$225.91.

In addition to the above mentioned work, the prisoners make all their own garments, and do all the work necessary to keep the building neat and clean.

The general health of the institution is good. One death occurred in the Prison, due to epilepsy.

Our total disbursements, expenses and farm products	
for the eight and one-half months is	\$39,499 81
Daily average attendance	306.90
Cost per capita.....	125 45

Such repairs have been made as were necessary to keep the building in good condition. Many of the walls in the front part of the building were painted by the girls. The fences around the grounds were repaired and painted and a new wall built on a portion of Michigan street.

I wish to express my appreciation to the officers and teachers for their aid during the year, and my gratitude to the Board for their support and aid in the performance of my duties.

Respectfully submitted,

EMILY E. RHOADES,
Superintendent.

REPORT OF PHYSICIAN.

To the Board of Trustees of the Indiana Industrial School for Girls and Indiana Womans Prison:

Ladies—The following report is respectfully submitted for the hospitals of the institution for the period from November 1, 1906, to July 17, 1907:

INDIANA INDUSTRIAL SCHOOL FOR GIRLS.

The total number of cases of illness treated in the hospital (including minor ailments) was two hundred and sixty.

The number of cases treated in the hospital for each month was as follows:

November	41	April	92
December	62	May	84
January	38	June	49
February	68	July	40
March	106		

The following diseases were treated in the hospital from November 1, 1906, to July 17, 1907:

<i>Disease.</i>	<i>No. of Cases.</i>	<i>Disease.</i>	<i>No. of Cases.</i>
Pulmonary tuberculosis	4	Corneal ulcer of eye.....	1
General tuberculosis	4	Syphilis (primary)	1
Acute bronchitis	2	Syphilis (secondary)	12
Acute colds	10	Pregnant	4
Acute dysentery	1	Suppressed menses	1
Acute diarrhoea	1	Scrofula of neck.....	2
Muscular rheumatism	7	Biliousness	7
Follicular tonsillitis	64	Fecal impaction	2
Measles	1	Inflamed eye	2
Anemia	7	Abscess of toe.....	1
Ovaritis	1	Burn of arm.....	1
Hemorrhoids	1	Vaccinations	33
Gastritis	1	Erythemia	2
Nasal catarrh	1	Erysipelas of face.....	5
Neuralgia of face.....	2	Varicella	10

<i>Disease.</i>	<i>No. of Cases.</i>	<i>Disease.</i>	<i>No. of Cases.</i>
Acne of body.....	2	Pediculi capitis	16
Abscess of vulva.....	2	Gonorrhoea	13
Menorrhagia	1	Childbirth	1
Eczema of face.....	2	Local treatments for pelvic	
Scabies (when admitted)..	6	diseases	25
Pediculi corporis	1		

Fifty-six girls were admitted and physical examinations made and recorded. Many of the girls were in poor physical condition, or suffering from some disease, when admitted. One colored girl, who was returned pregnant, was confined at the school March 5th of a living male child; her recovery was rapid and complete. Three white girls who were pregnant were sent to hospitals in the city to be confined.

There were three deaths, two from general tuberculosis, following typhoid fever, and one from general tuberculosis complicated with endocarditis. Dr. O. G. Pfaff was called once in consultation.

PENAL DEPARTMENT.

The total number of cases of illness treated in the hospital (including minor ailments) was fifty.

The number of cases treated in the hospital for each month was as follows:

November	6	April	5
December	10	May	7
January	11	June	10
February	5	July	9
March	8		

The following diseases were treated in the hospital from November 1, 1906, to July 17, 1907:

<i>Disease.</i>	<i>No. of Cases.</i>	<i>Disease.</i>	<i>No. of Cases.</i>
Pulmonary tuberculosis ...	1	Cystitis	2
Hemoptysis	1	Biliousness	4
Muscular rheumatism	7	Acute indigestion	4
Neuralgia	7	Chronic indigestion	1
Chronic nephritis	1	Influenza	2
Erysipelas of face and ear..	1	Epistaxis	1
Acute tonsillitis	5	Syphilitic rheumatism	1
Acute colds	5	Syphilis (tertiary)	3
Acute diarrhoea	1	Syphilitic ulcers	2
Acute dysentery	1		

The general health of the prisoners has been excellent, and no serious illness has occurred. One death occurred from epilepsy.

One hundred ten professional visits were made to the institution during the period from November 1, 1906, to July 17, 1907.

Thanking the Board of Trustees, Superintendent and officers for the helpfulness and consideration I have received at their hands, I remain,

Respectfully,

MARTHA J. SMITH,
Attending Physician.

REPORT OF SECRETARY.

To the Superintendent:

The following pages will show the financial and statistical tables of the Indiana Industrial School for Girls and the Indiana Womans Prison for the period from November 1, 1906, to July 17, 1907.

Respectfully,

NELLIE JOHNSTON,
Secretary.

FINANCIAL TABLES.

EXHIBIT A.

SHOWING AMOUNTS RECEIVED FROM THE STATE TREASURY ON
WARRANTS OF THE STATE AUDITOR FOR EXPENSES FROM
NOVEMBER 1, 1906, TO JULY 17, 1907.

November, 1906	\$3,944 99	
December, 1906	4,409 83	
January, 1907	4,935 93	
February, 1907	3,920 53	
March, 1907	5,280 56	
April, 1907	5,343 25	
May, 1907	3,923 34	
June, 1907	4,011 49	
July, 1907	3,554 81	
		\$39,324 73

EXPENDITURES.

ADMINISTRATION—SALARIES AND WAGES.

Trustees	\$1,266 66	
Officers	4,306 74	
School teachers	1,203 34	
Industrial teachers	2,652 64	
Employes	4,031 68	
Chapel	150 00	
		\$13,611 06

SUBSISTENCE.

Fresh meat	\$1,072 28
Salt meat and lard.....	433 00
Fish and oysters.....	94 79
Butter, eggs and poultry.....	592 49
Vegetables	758 13
Fresh fruits	371 07
Dried fruits	909 21
Canned goods	620 68
Breadstuffs, beans, cereals, etc.....	1,576 80

EXHIBIT A—Continued.

Vinegar and syrup	\$205 18	
Tea, coffee and sugar.....	425 08	
Milk	575 96	
Other food supplies.....	290 69	
	<hr/>	\$7,925 36

CLOTHING.

Clothing	\$2,194 75	
Shoes	1,003 36	
Tailor and sewing-room supplies.....	208 07	
	<hr/>	\$3,406 18

SUNDRIES.

School supplies	\$129 52	
Library, newspapers and periodicals.....	72 33	
Stationery and printing.....	263 59	
Furniture, fixtures, bedding, and other household equipment	2,854 61	
Laundry supplies, soaps, and other cleaners	924 51	
Medicines and hospital supplies.....	222 81	
Postage, telegraph and telephone.....	241 30	
Freight and transportation.....	1,009 90	
Stable, farm, garden, provender, etc.....	665 72	
Ice	80 80	
Music and amusements.....	289 61	
Fuel	2,900 50	
Water	133 36	
Light	1,255 04	
Engineer's supplies	83 58	
Other classifications	747 31	
Unclassified expense	116 70	
Ordinary repairs, minor improvements...	57 79	
	<hr/>	\$12,048 98
Maintenance	\$36,991 58	
Repairs	1,661 69	
Discharge	641 08	
Library	30 38	
	<hr/>	\$39,324 73

RECAPITULATION.

Administration	\$13,611 06	
Subsistence	7,925 36	
Clothing	3,406 18	
Sundries	12,048 98	
<hr/>		
Total maintenance		\$36,991 58
Repairs		1,661 69
Discharge		641 08
Library		30 38
		<hr/>
		\$39,324 73

EXHIBIT B.

STATEMENT OF THE AMOUNT PAID INTO THE STATE TREASURY
DURING THE PERIOD.

Amount due from counties from which girls were sent to the Indiana Indus- trial School for Girls for the six months ending April 30, 1907.....	\$10,092 30	
For the five months ending September 30, 1907	7,026 62	
Amount of receipts and earnings from laundries, sewing, caning, sale of mis- cellaneous articles:		
For quarter ending January 31, 1907	\$369 04	
For quarter ending April 30, 1907.	578 81	
For two and one-half months end- ing July 17, 1907.....	194 75	
<hr/>		
		\$1,142 60

EXHIBIT C.

STATEMENT OF THE AMOUNT DUE FROM THE SEVERAL COUNTIES ON ACCOUNT OF EXPENSE OF CLOTHING AND SUBSISTENCE OF GIRLS SENT TO THE INDIANA INDUSTRIAL SCHOOL FOR GIRLS FOR THE YEAR ENDING SEPTEMBER 30, 1907.

	<i>First Half.</i>	<i>Last Half.</i>
Allen	\$527 24	\$445 44
Bartholomew .....	.....	3 96
Boone	45 94	78 72
Cass	60 38	34 30
Clark	140 24	78 72
Clay	272 84	253 88
Clinton	118 14	62 32
Daviess	65 62	32 80
Dearborn	78 76	26 24
Decatur .....	.....	24 08
Dekalb	118 14	50 32
Delaware	347 18	281 90
Elkhart	236 28	145 88
Fayette	39 38	32 80
Floyd	78 76	26 24
Fountain	78 76	45 92
Gibson	40 92	65 60
Grant	72 14	32 80
Hamilton	62 34	82 00
Hancock	39 38	32 80
Harrison	8 76	32 80
Hendricks	78 77	32 80
Howard	183 76	144 32
Huntington	196 90	78 72
Jefferson	217 68	167 22
Jennings	39 38	16 40
Knox	426 60	295 20
Kosciusko	54 70	69 78
Lagrange	26 24	32 80
Lake	118 14	101 68
Laporte	168 48	114 80
Lawrence	118 12	111 32
Madison	577 56	532 28
Marion	2,385 09	1,139 20

EXHIBIT C—Continued.

	<i>First Half.</i>	<i>Last Half.</i>
Marshall	78 76	45 92
Martin	39 36	32 80
Miami	39 38	32 80
Montgomery	196 90	164 00
Morgan	39 38	16 40
Noble	220 98	164 00
Orange	13 12	.....
Owen	39 38	16 40
Parke	39 38	32 80
Porter	39 38	16 40
Pulaski	39 38	16 40
Putnam	78 76	45 92
Randolph	91 88	85 28
Rush	39 38	.....
St. Joseph	354 42	264 18
Shelby	118 14	98 40
Spencer	78 76	65 60
Steuben	78 76	65 60
Sullivan	157 52	95 12
Tippecanoe	65 88	125 10
Tipton	94 08	98 40
Vanderburgh	157 52	54 92
Vigo	362 12	377 14
Wabash	78 76	62 32
Warren	65 62	16 40
Warrick	45 92	65 60
Washington	78 76	52 48
Wayne	219 86	141 48
Wells	39 38	32 80
Whitley	78 76	45 92
Total	\$10,092 30	\$7,026 62

EXHIBIT D.

STATEMENT OF THE RECEIPTS AND EARNINGS FROM LABOR OF
INMATES AND OTHER SOURCES, FROM NOVEMBER 1, 1906, TO
JULY 17, 1907.

Laundry—Womans Prison	\$725 24
Sewing—Womans Prison	225 91
Sewing—Industrial School	5 60
Miscellaneous earnings	185 85
	<hr/>
Total	\$1,142 60

STATISTICAL TABLES.

INDIANA INDUSTRIAL SCHOOL FOR GIRLS.

TABLE No. 1.

SHOWING THE NUMBER OF GIRLS RECEIVED AND DISCHARGED
FROM NOVEMBER 1, 1906, TO JULY 17, 1907.

Number enrolled November 1, 1906.....	260
Number received on commitment.....	56
Number received from ticket-of-leave	26
<hr/>	
Total number received during the period	82
Number released on ticket-of-leave	114
Number released on final discharge	1
Number died	3
Number escaped	12
<hr/>	
Total number released during the period.....	130
<hr/>	
Total number enrolled July 17, 1907.....	212
Of the 56 received, were white	46
Of the 56 received, were black	10
Highest number present at any one time during period.	265
Lowest number present at any one time during period.	212
Average number present during period.....	258
Total number received since opening.....	1,644
Total number of deaths since opening.....	33
Number out on ticket-of-leave.....	210
Of the 56 received during the period—	
Number who could read and write.....	46
Illiterate	10
<hr/>	
	56

TABLE No. 2.

SHOWING NATIVITY OF GIRLS RECEIVED DURING PERIOD.

Indiana	43
Illinois	3
Kentucky	2
Ohio	2
Germany	1
Kansas	1
Georgia	1
Colorado	1
Austria	1
Alabama	1
<hr/>	
Total	56

TABLE No. 3.

SHOWING AGES OF GIRLS AT COMMITMENT.

<i>Years.</i>	<i>Number.</i>
Ten	2
Eleven	1
Twelve	2
Thirteen	5
Fourteen	11
Fifteen	19
Sixteen	10
Seventeen	6
<hr/>	
Total	56

TABLE No. 4.

SHOWING THE NUMBER OF GIRLS RECEIVED FROM THE DIFFERENT COUNTIES DURING THE PERIOD.

Allen	4	Madison	4
Bartholomew	1	Marion	18
Boone	2	Martin	1
Clay	2	Noble	1
Decatur	1	Randolph	1
Fountain	1	Tippecanoe	4
Gibson	1	Vigo	8
Hamilton	1	Warrick	1
Kosciusko	1	Wayne	1
Lawrence	2		—
Lake	1	Total	56

TABLE No. 5.

SHOWING COUNTIES FROM WHICH NO GIRLS HAVE BEEN RECEIVED.

Brown,

Ohio.

TABLE No. 6.

SHOWING COUNTIES FROM WHICH GIRLS HAVE BEEN RECEIVED SINCE THE OPENING OF THE INSTITUTION.

Adams	3	Crawford	2
Allen	63	Daviess	21
Bartholomew	25	Dearborn	20
Benton	5	Decatur	27
Blackford	13	Dekalb	14
Boone	16	Delaware	32
Carroll	2	Dubois	4
Cass	22	Elkhart	31
Clark	15	Fayette	6
Clay	14	Floyd	17
Clinton	15	Fountain	8

TABLE No. 6—Continued.

Franklin	1	Owen	5
Fulton	4	Parke	14
Gibson	9	Perry	3
Grant	21	Pike	3
Green	11	Porter	6
Hamilton	17	Posey	7
Hancock	3	Pulaski	4
Harrison	3	Putnam	9
Hendricks	5	Randolph	10
Henry	17	Ripley	1
Howard	54	Rush	6
Huntington	19	Scott	1
Jackson	12	Shelby	16
Jasper	5	Spencer	6
Jay	4	Starke	5
Jefferson	21	Steuben	11
Jennings	6	St. Joseph	28
Johnson	12	Sullivan	17
Knox	21	Switzerland	3
Kosciusko	27	Tippecanoe	43
Lagrange	4	Tipton	15
Lake	12	Vanderburgh	54
Laporte	15	Vermillion	2
Lawrence	14	Vigo	81
Madison	53	Wabash	8
Marion	353	Warren	2
Marshall	5	Warrick	6
Martin	4	Washington	8
Miami	11	Wayne	50
Monroe	13	Wells	9
Montgomery	39	White	3
Morgan	10	Whitley	9
Newton	3	United States	3
Noble	12		
Orange	1	Total	1,644

TABLE No. 7.

SHOWING SOCIAL CONDITION OF PARENTS OF GIRLS REMAINING
JULY 17, 1907, AT TIME OF COMMITMENT.

Parents living together.....	43
Parents living, but separated.....	32
Father dead, mother widow.....	23
Mother dead, father widower.....	19
Parents dead	27
Step-father	25
Step-mother	27
Step-father and step-mother.....	7
Illegitimate	9
Total	212

TABLE No. 8.

SHOWING POPULATION SINCE ORIGIN OF INDUSTRIAL SCHOOL
FOR GIRLS.

- a.* Total received each year on commitment.
b. Total discharged, died or withdrawn during each year.
c. Total enrolled at the end of each year.
d. Daily average attendance since 1890.

<i>Years.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1873.....	15	..	15	.....
1874.....	84	15	84	.....
1875.....	57	14	127	.....
1876.....	57	28	150	.....
1877.....	40	53	138	.....
1878.....	44	32	147	.....
1879.....	52	59	147	.....
1880.....	41	45	148	.....
1881.....	52	58	148	.....
1882.....	51	62	144	.....
1883.....	34	41	143	.....
1884.....	48	55	142	.....
1885.....	40	33	132	.....
1886.....	38	48	177	.....

TABLE No. 8—Continued.

<i>Years.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1887.....	31	51	128	.....
1888.....	44	18	133	.....
1889.....	48	22	144	.....
1890.....	43	24	151	152.1
1891.....	42	20	143	142.5
1892.....	48	56	144	134.3
1893.....	45	36	148	146.3
1894.....	36	16	152	154.0
1895.....	60	29	180	169.0
1896.....	30	19	202	189.7
1897.....	47	55	206	206.2
1898.....	46	75	200	206.6
1899.....	39	80	180	184.3
1900.....	35	55	187	182.6
1901.....	44	107	144	166.5
1902.....	41	40	175	156.9
1903.....	53	34	207	183.5
1904.....	51	75	203	207.6
1905.....	69	55	239	214.0
1906.....	85	84	260	253.1
1907.....	56	130	212	258.0

STATISTICAL TABLES.

WOMANS PRISON.

TABLE No. 1.

SHOWING NUMBER OF PRISONERS RECEIVED AND DISCHARGED
FROM NOVEMBER 1, 1906, TO JULY 17, 1907.

Number remaining November 1, 1906.....	52
Received during the 8½ months.....	11
Returned from parole	3
	— 66
Discharged by expiration of sentence.....	5
Paroled by Board of Parole.....	13
Died	1
Pardoned	1
	— 20
Remaining, July 17, 1907.....	46
Received during the period—white.....	6
Received during the period—black.....	5
Highest number of inmates during the period.....	54
Lowest number of inmates during the period.....	44
Average number of inmates during the period.....	48.9
Recommitted since opening	54
Total number received since opening.....	871
Total number discharged since opening.....	861
Ran away while on parole.....	10
Oldest prisoner as to age—years.....	62
Oldest prisoner as to time served—years.....	26
Lifetime prisoners	9

TABLE No. 2.

SHOWING DIFFERENT CRIMES.

<i>Crime.</i>	<i>Received in Period.</i>	<i>Remaining July 17, 1907.</i>
Petit larceny	4	18
Grand larceny	2	6
False personation .....	..	1
Voluntary manslaughter .....	..	1
Aiding prisoners to escape from sheriff.. ..	..	1
Murder	1	10
Malicious mayhem .....	..	1
Arson	1	2
Receiving stolen goods	3	3
Sodomy .....	..	1
Abortion .....	..	1
False attesting .....	..	1
	<hr/>	<hr/>
	11	46

TABLE No. 3.

SHOWING THE NUMBER OF COMMITMENTS ANNUALLY, WITH
THE PRINCIPAL OFFENSES.

YEAR.	Total Commitments.	Larceny, All Kinds.	Burglary and Robbery.	Murder, Man-slaughter, Infanticide.	Arson.	Violation of Federal Laws.	Assaults of All Kinds.	Various Crimes.
1873	19	12		6		1		
1874	17	12	1	4				
1875	14	11		3				
1876	14	9	3	2				
1877	33	28		2	1	1		1
1878	22	16		2		2		2
1879	21	17		1		1	2	
1880	34	27				1	1	5
1881	26	21		2	1	1		1
1882	31	24		3			1	3
1883	18	15		1				2
1884	36	25	3	3	1	1		3
1885	19	11	1	1	1	3	1	1
1886	28	21		1	1		1	4
1887	31	24		3				4
1888	27	18	1	2		1		5
1889	32	20	2	2		2		6
1890	23	18			1	2		2
1891	31	21	3			6	1	
1892	25	13	1	3	4		2	2
1893	22	12	2	3	1	1	1	2
1894	25	16		2		1	1	5
1895	12	4		2	2	1		3
1896	28	18	2	2	1	1	1	3
1897	26	16				6	1	3
1898	32	19	1	1		7		4
1899	37	22	1	3		3	3	5
1900	27	20	1	4			1	1
1901	31	26	1				1	3
1902	27	33		3	1			
1903	25	20		1			2	2
1904	29	19	1	4		1	3	1
1905	16	9		1		3		3
1906	22	16		1				5
1907	11	6		1	1			3

TABLE No. 4.

SHOWING THE SENTENCES OF PRISONERS.

<i>Sentence.</i>	<i>Received in Period.</i>	<i>Remaining July 17, 1907.</i>
One to three years.....	5	19
One to eight.....	1	1
One to fourteen.....	3	7
One to twenty-one.....	..	1
Two to fourteen.....	..	3
Two to twenty-one.....	1	5
Three to fourteen .....	..	1
Life	1	9
Totals	11	46

TABLE No. 5.

SHOWING STATES AND COUNTRIES OF WHICH PRISONERS ADMITTED DURING THIS PERIOD ARE NATIVE.

Indiana	4
Illinois	2
Kentucky	4
Russia	1
Total	11

TABLE No. 6.

SHOWING COUNTIES FROM WHICH PRISONERS HAVE BEEN RECEIVED DURING THIS PERIOD.

Allen	1	Vanderburgh	2
Clinton	1	Vigo	2
Gibson	1	Wayne	1
Grant	1		—
Tipton	1	Total	11
Tippecanoe	1		

TABLE No. 7.

SHOWING COUNTIES FROM WHICH PRISONERS HAVE BEEN RECEIVED SINCE OPENING.

Adams	2	Lawrence	4
Allen	17	Madison	11
Bartholomew	10	Marion	194
Benton	3	Martin	3
Blackford	6	Monroe	4
Boone	3	Montgomery	10
Carroll	2	Miami	5
Cass	12	Morgan	4
Clark	8	Noble	4
Clay	9	Owen	1
Clinton	11	Parke	1
Daviess	11	Pike	3
Dearborn	3	Posey	9
Decatur	7	Pulaski	1
Delaware	14	Putnam	3
Dubois	7	Randolph	9
Elkhart	4	Ripley	1
Fayette	2	Rush	3
Floyd	18	Scott	1
Franklin	2	St. Joseph	8
Fountain	3	Shelby	11
Fulton	2	Spencer	8
Gibson	17	Starke	2
Grant	8	Sullivan	2
Greene	5	Switzerland	3
Hamilton	5	Tippecanoe	10
Hancock	3	Tipton	3
Henry	5	Vanderburgh	132
Howard	6	Vigo	64
Huntington	6	Wabash	4
Jackson	9	Warren	1
Jefferson	15	Warrick	5
Jennings	9	Washington	3
Johnson	6	Wayne	18
Knox	10	White	5
Kosciusko	1	Whitley	2
Lagrange	1	United States	48
Lake	2		
Laporte	7	Total	871

TABLE No. 8.

COUNTIES FROM WHICH NO PRISONERS HAVE BEEN RECEIVED.

Brown.	Jay.	Porter.
Crawford.	Marshall.	Steuben.
Dekalb.	Newton.	Union.
Harrison.	Ohio.	Vermilion.
Hendricks.	Orange.	Wells.
Jasper.	Perry.	Total, 17.

TABLE No. 9.

SHOWING AGE OF PRISONERS REMAINING JULY 17, 1907.

Eighteen	2	Thirty-five	1
Nineteen	3	Thirty-six	1
Twenty	2	Thirty-eight	2
Twenty-one	3	Forty	3
Twenty-three	3	Forty-two	1
Twenty-five	4	Fifty	2
Twenty-six	1	Fifty-five	1
Twenty-seven	2	Sixty	1
Twenty-nine	3	Sixty-one	1
Thirty	5	Sixty-two	1
Thirty-three	1		
Thirty-four	2	Total	46

TABLE No. 10.

SHOWING THE GRADE OF EDUCATION, HABITS, SOCIAL RELATIONS, ACCORDING TO OWN STATEMENT OF THOSE RECEIVED DURING THE PERIOD.

Color—		Conjugal—	
White	6	Married	8
Black	5	Single	3
Total		Total	
11		11	
Education—		Religious Denominations—	
Read and write.....	10	Baptist	5
Illiterate	1	Christian	1
Total		United Brethren	1
11		Jewish	1
Habits—		Non-professors	3
Temperate	5	Total	
Intemperate	6	11	
Total			
11			

TABLE No. 11.

SHOWING WORK DONE BY INMATES DURING THIS PERIOD.

SEWING FOR PATRONS.

Quilts	36
Comforts	4
Napkins embroidered	15
Lunch cloths embroidered.....	3
Drawn-work handkerchiefs	24
Hemstitched handkerchiefs	30
Drawn work dresser scarfs.....	2
Embroidered center pieces	4
Embroidered cushion	1
Jackets embroidered	2
Waist embroidered	1
Napkins hemmed	144
Towels hemmed	18
Black silk skirts	1

TABLE No. 11—Continued.

WORK DONE FOR OFFICERS.

Dress skirts	4
Shirtwaists	19
Shirtwaist suits	14
Jacket suits	1
Dressing sacques	1
Silk underwaists	1
Over blouse	1
Night dresses	9
Silk night dress	1
Silk underskirts	2
Underskirts	7
Corset covers	7
Combination suits	2
Battenberg center pieces.....	1
Drawn work center pieces.....	1
Hemstitched handkerchiefs	16
Drawn-work handkerchiefs	27
Drawn-work lunch cloths	1
Embroidered doilies	3
Silk shoulder straps, pair.....	1
Lace collar and cuffs, pair.....	2
Garments repaired	29
Suits made over	4
Dress skirts made over.....	4
Underskirts made over.....	1
Waists altered	4

WORK DONE BY WOMANS PRISON FOR GIRLS SCHOOL.

Shirtwaists	34
Shirtwaist suits	17
Wool dress skirts.....	37
White aprons	15
Baby suits, pieces	38
Cloth skirts altered.....	5
Napkins repaired	28
Tablecloths repaired	22
Curtains repaired, pairs.....	4
Mattresses made and renovated.....	195

TABLE No. 11—Continued.

SEWING DONE FOR PRISONERS.

Dresses, gingham, percale and calico.....	92
Underskirts	97
Night dresses	124
Chemises	65
Underdrawers	41
Aprons	80
Sheets hemmed	90
Pillow slips made	55
Stand covers	26
Towels hemmed	71
Laundry bags	4
Washcloths	130
Sunbonnets	3
Underwaists	8
Baby suits, pieces.....	14
Quilts quilted	3
Bed pads made.....	3
Rugs made	3
Garments repaired	1,084
Iron-holders made	1,631
Mats for irons made.....	220
Stockings repaired	219
Mattresses made and renovated.....	6
Pillows renovated	25
Carpet rags made, pounds.....	80

BAKERY.

Bread, loaves	5,678
Pies	215
Cookies	3,049
Ginger bread, pans.....	39
Layer cakes	12

REPORT OF BOARD OF TRUSTEES.

To the HON. J. FRANK HANLY, Governor of Indiana:

We, the new Board of Trustees of the Indiana Womans Prison, met in session for the first time April 15, 1907. At that date and until August 1st we held joint monthly meetings with the Board of Trustees of the Indiana Girls' School.

In June the Board of Trustees of the Womans Prison accepted the plans submitted by Messrs. R. P. Daggett & Co., Architects, for the remodeling of the west wing of the prison for the Correctional Department established by the last Legislature. There was an appropriation of \$40,000.00, which included the heating and lighting of the Institution.

After advertising for bids, the same were received and opened August 21st. E. F. Kottlowksi Co. secured the contract for remodeling the west wing, Kirkhoff Bros. & Co., the heating, and Sanborn-Marsh Electric Co., the lighting. The contracts were soon let, and work commenced immediately.

Later, bids for plumbing were advertised for and Foley Bros. & Co. secured the contract. The contract provides that the heating, lighting and plumbing be completed and the west wing ready for furnishing by December 1, 1907.

The Lodge has undergone much needed repairs. The fences have been painted and repaired, and also a new wall built under the fence on a portion of Michigan street.

After the division of the institutions there was no library for use in the Womans Prison. Upon consulting the attorney-general we expended the balance remaining in the library fund, and have established a library for the prison.

Number of women present July 17, 1907.....	46
Received on new commitments	3
	— 49
Discharged by expiration of sentence.....	1
	—
Remaining September 30, 1907.....	48

Income from Womans Prison:

Laundry	\$360 65
Sewing	55 65

Income from garden.....	152 70
Income from hennery	14 64
Total	<u>\$583 64</u>

Financial Statement:

Total appropriation, including specifics, and adding farm products (farm products, \$167.34).....	\$5,537 36
Unused appropriations	\$31 80
Daily attendance	46.16
Cost per capita	<u>\$119 96</u>

We have returned the unused specific appropriations, and all our earnings, making totals as follows:

Unused appropriations	\$31 80
Womans Prison	416 30
Miscellaneous earnings	<u>11 05</u>
Total	<u>\$459 15</u>

For a more detailed report of the work we submit the reports of the Superintendent, Secretary and Physician.

We are under obligations to the Governor and other State officials, and many friends, for their support and assistance in carrying forward this work.

Respectfully submitted,

FANNY McKEE, Pres.

ELLA B. McCOY, Vice-Pres.

ALICE E. WAUGH, Sec'y.

NETTIE A. WILSON, Treas.

REPORT OF SUPERINTENDENT.

Ladies:

I respectfully submit to you my report of the Indiana Womans Prison for the two and one-half months from July 17, 1907, to September 30, 1907.

During this period three women were received on new commitments and one discharged, making a total of forty-eight women present September 30, 1907.

The earnings from the prison laundry amounted to \$360.65, and from the plain sewing \$55.65, making a total of \$1,085.89 earned in the laundry during the year, and \$281.56 from the plain sewing.

Expenses:

Our total disbursements through current expenses and farm products for two and one-half months is.....\$5,537 36
Daily average attendance..... 46 16
Cost per capita..... 119 96

The Lodge has been remodeled and repapered, and painted inside and outside.

The work of remodeling the west wing of the building and installing new heating and lighting plants, for which the last Legislature made provision, is going on very nicely. As soon as this work is completed the Correctional Department for Women will be established.

I wish to thank the officers and members of the Board for their support and aid in performing my duties.

Respectfully submitted,

EMILY E. RHOADES,
Superintendent.

REPORT OF PHYSICIAN.

To the Board of Trustees of the Indiana Womans Prison:

Ladies—The following report is respectfully submitted for the hospital of the institution for the two and one-half months ending September 30, 1907:

The total number of cases of illness treated (including minor ailments) from July 17, 1907, to September 30, 1907, was twenty-four.

The number of cases of illness treated for each month was as follows:

July	9
August	7
September	8

The following diseases were treated from July 17th to the end of the fiscal year, September 30, 1907:

<i>Disease.</i>	<i>Cases Treated.</i>	<i>Disease.</i>	<i>Cases Treated.</i>
Catarrhal jaundice	1	Cystitis	2
Biliousness	5	Neuralgia	1
Tertiary syphilis	2	Abscess of tooth.....	1
Syphilitic ulcers of leg.....	1	Indigestion	2
Specific vaginitis	1	Inflamed eye	1
Acute diarrhea	3	Epistaxis	1
Menorrhagia	1	Childbirth	1
Inflammatory rheumatism ..	1		

Of the three women admitted, one was suffering from inflammatory rheumatism and the others were in good physical condition.

One colored woman was confined of a still-born male child on July 31, 1907. She made a complete recovery.

Twenty-five professional visits were made to the Prison from July 17, 1907, to September 30, 1907.

I wish to thank the Board of Trustees, Superintendent and all officers for the help and consideration I have received.

Respectfully submitted,

MARTHA J. SMITH,
Attending Physician.

REPORT OF SECRETARY.

To the Board of Trustees:

The following pages will show the financial and statistical tables of the Indiana Womans Prison for the two and one-half months ending September 30, 1907.

Respectfully,

ESTELLA CHARLES,
Secretary.

FINANCIAL TABLES.

EXHIBIT A.

SHOWING AMOUNTS RECEIVED FROM THE STATE TREASURY ON
WARRANTS OF THE STATE AUDITOR FOR EXPENSES FROM
JULY 17, 1907, TO SEPTEMBER 30, 1907.

July, 1907	\$1,057 87
August, 1907	1,166 77
September, 1907 (including repairs and library)	3,145 38
Total	<hr/> \$5,370 02

EXPENDITURES.

ADMINISTRATION—SALARIES AND WAGES.

Trustees	\$250 00
Officers	1,070 87
Industrial teachers	39 00
Employes	523 76
Chapel	18 00
	<hr/> \$1,901 63

SUBSISTENCE.

Fresh meat	\$111 53
Salt meat and lard	12 56
Butter, eggs and poultry	45 92
Vegetables	16 90
Fresh fruits	69 15
Breadstuffs, beans, cereals, etc.	47 23
Vinegar and syrup	16 80
Tea, coffee and sugar	20 86
Milk	78 20
Other food supplies	8 59
	<hr/> \$427 74

EXHIBIT A—Continued.

RECAPITULATION.

Administration	\$1,901 63
Subsistence	427 74
Clothing	182 83
Sundries	1,556 10
<hr/>	
Total maintenance	\$4,068 30
Repairs	1,057 18
Library	244 54
<hr/>	
Total	\$5,370 02

EXHIBIT B.

STATEMENT OF THE AMOUNT PAID INTO THE STATE TREASURY.

Amount of receipts and earnings from laundry,
sewing, and sale of miscellaneous articles:

For one-half month ending July 31, 1907..\$138 45

For quarter ending September 30, 1907.. 288 90

Total	\$427 35
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EXHIBIT C.

STATEMENT OF THE RECEIPTS AND EARNINGS FROM LABOR OF
INMATES AND OTHER SOURCES, FROM JULY 17, 1907, TO SEP-
TEMBER 30, 1907.

Laundry	\$360 65
Sewing	55 65
Miscellaneous earnings	11 05
<hr/>	
Total	\$427 35

STATISTICAL TABLES.

TABLE No. 1.

SHOWING NUMBER OF PRISONERS RECEIVED AND DISCHARGED
FROM JULY 17, 1907, TO SEPTEMBER 30, 1907.

Number remaining July 17, 1907.....	46
Received on new commitments.....	3
	— 49
Discharged by expiration of sentence.....	1
	—
Remaining September 30, 1907.....	48
Received during this period—white.....	3
Highest number of inmates during this period.....	48
Lowest number of inmates during this period.....	45
Average number of inmates during this period.....	46.16
Recommitted since opening.....	54
Total number received since opening.....	874
Total number discharged since opening.....	862
Oldest prisoner as to age—years	62
Oldest prisoner as to time served—years	26
Lifetime prisoners	9

TABLE No. 2.

SHOWING DIFFERENT CRIMES.

<i>Crime.</i>	<i>Received in 2½ Mos.</i>	<i>Remaining Sept. 30, 1907.</i>
Petit larceny	2	19
Grand larceny	1	7
False personation		1
Voluntary manslaughter		1
Aiding prisoners to escape from sheriff..		1
Murder		10
Malicious mayhem		1
Arson		2
Receiving stolen goods.....		3

TABLE No. 2—Continued.

Sodomy	1
Abortion	1
Falsely attesting	1
	<hr/>
	3
	<hr/>
	48

TABLE No. 3.

SHOWING THE NUMBER OF COMMITMENTS, WITH THE PRINCIPAL OFFENSES.

YEAR.	Total Commitments.	Larceny, All Kinds.	Burglary and Robbery.	Murder, Man-slaughter, Infanticide.	Arson.	Violation of Federal Laws.	Assaults of All Kinds.	Various Crimes.
1873	19	12		6		1		
1874	17	12	1	4				
1875	14	11		3				
1876	14	9	3	2				
1877	33	28		2	1	1		1
1878	22	16		2		2		2
1879	21	17		1		1	2	
1880	34	27				1	1	5
1881	26	21		2	1	1		1
1882	31	24		3			1	3
1883	18	15		1				2
1884	36	25	3	3	1	1		3
1885	19	11	1	1	1	3	1	1
1886	28	21		1	1		1	4
1887	31	24		3				4
1888	27	18	1	2		1		5
1889	32	20	2	2		2		6
1890	23	18			1	2		2
1891	31	21	3			6	1	
1892	25	13	1	3	4		2	2
1893	22	12	2	3	1	1	1	2
1894	25	16		2		1	1	5
1895	12	4		2	2	1		3
1896	28	18	2	2	1	1	1	3
1897	26	16				6	1	3
1898	32	19	1	1		7		4
1899	37	22	1	3		3	3	5
1900	27	20	1	4			1	1
1901	31	26	1				1	3
1902	27	23		3	1			
1903	25	20		1			2	2
1904	29	19	1	4		1	3	1
1905	16	9		1		3		3
1906	22	16		1				5
1907	3	3						

TABLE No. 4.

SHOWING SENTENCES OF PRISONERS.

<i>Sentence.</i>	<i>Received in 2½ Mos.</i>	<i>Remaining Sept. 30, 1907.</i>
One to three years.....		18
One to eight.....	2	3
One to fourteen.....	1	8
One to twenty-one.....		1
Two to fourteen.....		3
Two to twenty-one.....		5
Three to fourteen.....		1
Life		9
Totals	3	48

TABLE No. 5.

SHOWING STATE OF WHICH PRISONERS ADMITTED DURING
THIS PERIOD ARE NATIVE.

Indiana	3
---------------	---

TABLE No. 6.

SHOWING COUNTIES FROM WHICH PRISONERS HAVE BEEN RE-
CEIVED DURING THIS PERIOD.

Marion	1
Randolph	1
Ripley	1
Total	3

TABLE No. 7.

SHOWING COUNTIES FROM WHICH PRISONERS HAVE BEEN RE-
CEIVED SINCE OPENING.

Adams	2	Blackford	6
Allen	17	Boone	3
Bartholomew	10	Carroll	2
Benton	3	Cass	12

TABLE No. 7—Continued.

Clark	8	Monroe	4
Clay	9	Montgomery	10
Clinton	11	Miami	5
Daviess	11	Morgan	4
Dearborn	3	Noble	4
Decatur	7	Owen	1
Delaware	14	Parke	1
Dubois	7	Pike	3
Elkhart	4	Posey	9
Fayette	2	Pulaski	1
Floyd	18	Putnam	3
Franklin	2	Randolph	10
Fountain	3	Ripley	2
Fulton	2	Rush	3
Gibson	17	Scott	1
Grant	8	St. Joseph	8
Greene	5	Shelby	11
Hamilton	5	Spencer	8
Hancock	3	Starke	2
Henry	5	Sullivan	2
Howard	6	Switzerland	3
Huntington	6	Tippecanoe	10
Jackson	9	Tipton	3
Jefferson	15	Vanderburgh	132
Jennings	9	Vigo	64
Johnson	6	Wabash	4
Knox	10	Warren	1
Kosciusko	1	Warrick	5
Lagrange	1	Washington	3
Lake	2	Wayne	18
Laporte	7	White	5
Lawrence	4	Whitley	2
Madison	11	United States prisoners...	48
Marion	195		
Martin	3	Total	874

TABLE No. 8.

COUNTIES FROM WHICH NO PRISONERS HAVE BEEN RECEIVED.

Brown,	Jay,	Porter,
Crawford,	Marshall,	Steuben,
Dekalb,	Newton,	Union,
Harrison,	Ohio,	Vermillion,
Hendricks,	Orange,	Wells,
Jasper,	Perry,	Total, 17.

TABLE No. 9.

SHOWING AGE OF PRISONERS REMAINING SEPTEMBER 30, 1907.

Seventeen	1	Thirty-four	2
Eighteen	2	Thirty-five	1
Nineteen	3	Thirty-six	1
Twenty	2	Thirty-eight	2
Twenty-one	3	Forty	3
Twenty-three	3	Forty-two	1
Twenty-five	5	Fifty	2
Twenty-six	1	Fifty-five	1
Twenty-seven	2	Sixty	1
Twenty-nine	3	Sixty-one	1
Thirty	5	Sixty-two	1
Thirty-two	1		
Thirty-three	1	Total	48

TABLE No. 10.

SHOWING THE GRADE OF EDUCATION, HABITS, SOCIAL RELATIONS, ACCORDING TO OWN STATEMENT OF THOSE RECEIVED DURING THIS PERIOD.

Color—		Conjugal—	
White	3	Married	1
		Single	2
Education—		Total	3
Read and write.....	3	Religious Denominations—	
Habits—		Episcopal	1
Temperate	3	Non-professors	2
		Total	3

TABLE No. 11.

SHOWING WORK DONE BY INMATES DURING THIS PERIOD.

SEWING FOR PATRONS.

Quilts	8
Comforts	2
Napkins embroidered	10
Lunch cloths embroidered	1
Drawn-work handkerchiefs	12

WORK DONE FOR OFFICERS.

Shirtwaists	3
Shirtwaist suits	2
Jacket suits	1
Wrapper	1
Dressing sacque	1
Eton jacket and girdle.....	1
Lace waist	1
Drawn-work center piece	1
Drawn-work lunch cloth	1
Embroidered doilies	4
Embroidered center pieces	1
Embroidered shirtwaist suit	1

SEWING DONE FOR PRISONERS.

Dresses, gingham, percale and calico.....	14
Underskirts	10
Underdrawers	6
Sunbonnets	6
Underwaists	6
Iron-holders made	192
Stockings repaired	101

BAKERY.

Bread, loaves	1,536
Pies	36
Cookies	494
Ginger bread, pans	16
Tomato butter, gallons	48
Tomatoes canned, quarts	386
Green tomato pickles, gallons.....	25

TABLE No. 11—Continued.

Grape butter, quarts	16 $\frac{1}{2}$
Spiced fruit, quarts	8
Marmalade, quarts	13
Jelly, glasses	196
Preserves, quarts	96
Sauer kraut, barrels	3

PRODUCTS OF OUTDOOR LABOR.

Tomatoes, 104 bushels	\$44 52
Green tomatoes, 16 bushels	6 85
Onions, 26 bushels	12 05
Cabbage, 65 bushels	19 50
String beans, 20 bushels	11 82
Turnips, 25 bushels	13 01
Beets, 12 $\frac{1}{2}$ bushels	11 35
Potatoes, 9 bushels	6 13
Sweet corn, 141 dozen	14 77
Radishes, 87 $\frac{1}{2}$ dozen	11 15
Lettuce, 118 pounds	7 44
Grapes, 140 pounds	3 85
Peas, 12 bushels	7 73
Pumpkins, 50	5 00
Lima beans, 247 quarts.....	15 00
Navy beans, dried, 30 quarts.....	2 00
Rhubarb, 571 bunches	10 12
Chickens, 435 pounds.....	35 77
Eggs, 869 dozen	104 36
<hr/>	
Total	\$342 42

CLOTHING.

Clothing	\$44 46
Shoes	94 50
Tailor and sewing room supplies.....	43 87
<hr/>	
	\$182 83

SUNDRIES.

Stationery and printing.....	\$89 13
Furniture, fixtures, bedding and other house- hold equipment	94 45
Laundry supplies, soaps and other cleaners.....	11 13

TABLE No. 11—Continued.

Medicines and hospital supplies	\$13 69	
Postage, telegraph and telephone.....	36 10	
Freight and transportation	327 95	
Stable, farm, garden and provender.....	232 00	
Ice	62 37	
Music and amusements	12 70	
Fuel	369 66	
Water	50 01	
Light	115 84	
Engineer's supplies	37 75	
Other classifications	93 47	
Unclassified expense	60	
Ordinary repairs, minor improvements.....	9 25	
		<hr/> \$1,556 10
Maintenance	\$4,068 30	
Repairs	1,057 18	
Library	244 54	
		<hr/>
Total	\$5,370 02	

LAWS

Governing and Controlling

THE

Indiana Industrial School for Girls

AND

Indiana Womans Prison.

WOMANS PRISON—GIRLS INDUSTRIAL SCHOOL.

(1869 S., p. 61. In force May 13, 1869.)

8254. (6162.) ESTABLISHED. 1. There shall be established as soon as practicable after the taking effect of this act, at or near the city of Indianapolis, an institution to be known as the "Indiana Reformatory Institution for Women and Girls."

Diminution of time for good behavior, Sections 8238-8241.

Home for friendless women, Sections 8243-8350.

The penal department created by this act is a State prison, and the act of April, 1881, concerning public offenses and their punishment, did not repeal any of the provisions of this act. *Walton v. State*, 88 Ind. 9.

(Acts 1899, p. 22. In force February 7, 1899.)

8255. NAME CHANGED. 1. That the name of the State institution known as "The Reform School for Girls and Women's Prison" be changed. That hereafter said institution shall be, and they are hereby declared to be separate and distinct; the first of said institutions to be named and known as "The Indiana Industrial School for Girls"; the second institution to be named and known as "The Indiana Womens Prison."

8255a. LAWS APPLICABLE. 2. All laws in force respecting the said "Reform School for Girls and Womens Prison," including the management thereof, shall, as far as applicable thereto, apply and continue to these said separate institutions.

(1877, p. 64. In force March 3, 1877.)

8256. (6163.) BOARD OF MANAGERS TO BE WOMEN—BOARD OF AUDIT. 2. The general supervision and government of said institution shall be vested in a Board of Managers, consisting of three persons, who shall be women, to be known and designated as the "Board of Managers of the Indiana Reformatory Institution for Women and Girls." The members of the first Board, to be appointed under this act, shall be Mrs. Emily A. Roache, Mrs. Rhoda M. Coffin and Mrs. Eliza Hendricks, whose terms of office shall be respectively two, four and six years—said terms of office to expire in the same order as the names occur in this act. As vacancies subsequently occur in the Board, their successors shall

be appointed by the Governor, by and with the advice and consent of the Senate, and shall hold their offices for the term of four years from their appointment, and until their successors are appointed and qualified. The term of each manager shall be designated in her certificate of appointment. Upon the expiration of the term of service of any member of the Board of Managers, one manager shall be appointed in the same manner, whose term of office shall continue four years from and after the expiration of the term of her predecessor and until her successor is appointed and qualified. All vacancies in said Board shall be filled by appointment by the Governor, subject to approval by the Senate at its next succeeding session. The person appointed to fill a vacancy shall be entitled to hold her office for the unexpired portion of the term of the person whom she may be appointed to succeed. Said managers, before entering upon the discharge of their duties, shall take an oath or affirmation faithfully to perform the duties of their office; which oath or affirmation shall be filed and preserved in the office of the Secretary of State: Provided, however, That the Governor, Auditor and Secretary of State, shall constitute a Board of Audit, whose duty it shall be to examine, audit and approve of the accounts and acts of said Board of Managers appointed under the provisions of this act.

(1869 S., p. 61. In force May 13, 1869.)

8257. (6164.) PRESIDENT. 3. The said Board of Managers shall appoint one of their number as President of the Board.

8258. (6165.) LOCATION. 4. The Governor is hereby empowered to select and establish a site for said institution, which shall not be more than five miles distant from the corporate limits of the city of Indianapolis; and, for that purpose, he is authorized to receive, in the name of the State, by donation or purchase, not less than three nor more than ten acres of land, and he shall deposit a certificate of his location of the institution, together with the deed or deeds of conveyance of such land, with the Secretary of State.

8259. (6166.) MANAGEMENT—BUILDINGS. 5. The said institution shall consist of two separate and distinct departments, one of which shall be designated as the "Reformatory Department" and the other as the "Penal Department." Both of said departments shall be under the management of the same officers, but separate buildings for the inmates of each department shall be provided on the same grounds.

8260. (6167.) PLANS. 6. The Board of Managers shall, with the approval of the Governor, prepare and adopt plans for the grounds, buildings and fixtures necessary and proper for such an institution within the limits of the appropriation hereinafter made, and, if practicable, the plans shall be so arranged that the buildings can be enlarged or added to without injury to their symmetry or usefulness. The Board may, with the like approval of the Governor, make and execute all necessary contracts for the construction of such buildings and fixtures and the improvement of the grounds according to the plans which may have been so adopted.

8261. (6168.) FEMALE SUPERINTENDENT AND OFFICERS—RULES. 7. Said Board of Managers may, with the approval of the Governor, appoint a suitable Superintendent of said institution and all necessary subordinates (not exceeding a number to be fixed by the Governor), and fix their respective salaries; and shall have power, with the like approval, to make and enforce all such rules, regulations, ordinances and by-laws for the government and discipline of said institution, and for the admission of girls into the Reformatory Department thereof, as they may deem just and proper. The Superintendent and all the subordinate officers of said institution shall be females: Provided, however, That if a married woman shall be appointed Superintendent, or to any subordinate position, the husband of such appointee may, with the consent of the Board, reside in the institution, and may be assigned such duties or employment as the Board of Managers may prescribe.

8262. (6169.) BOND OF SUPERINTENDENT. 8. Before entering upon the discharge of her duties, the Superintendent shall give bond to the State of Indiana, in the sum of ten thousand dollars or over, with security to be approved by said Board of Managers, conditioned for the faithful performance of her duties as such Superintendent, and that she will faithfully account for all moneys, property and effects intrusted to her as such, and shall take an oath or affirmation to discharge the duties of her said office with fidelity; and if said Superintendent shall be a married woman, such bond shall be executed by her husband and her sureties, but need not be signed by herself.

8263. (6170.) DUTIES OF SUPERINTENDENT. 9. The Superintendent shall reside at the institution, and shall have the charge and custody of the buildings and other property thereof,

and of the inmates who may be committed to both departments of the institution, and shall govern them in accordance with such rules and regulations as the Board of Managers may prescribe, and shall employ such methods of discipline as will, as far as possible, reform the characters, preserve the health, promote regular improvement in the studies and industrial employments of the inmates of the institution, and secure them fixed habits of industry, morality and religion. The rules, regulations and discipline of each department of the institution shall be adapted to the character of the inmates thereof.

8264. (6171.) INTEREST IN CONTRACTS. 10. No manager, officer, or employe of said institution shall be personally interested, directly or indirectly, in any contract, purchase or sale made by or to or on behalf of said institution, or in any business carried on for or on behalf of said institution. All contracts, purchases or sales made in violation of this section shall be deemed and held null and void; and all money paid to such managers, officers or employes, or to any person for their benefit, in whole or in part consideration of such purchase, contract or sale, may be recovered back by civil action, in the name of the State of Indiana, against such manager, officer, or employe, or against any person acting in her or his behalf, and it is hereby made the duty of the Governor and Board of Managers, upon satisfactory proof of such interest, to immediately remove such manager, officer or employe so offending and to report the facts to the Attorney-General, who shall take such legal steps in the premises as he may deem expedient.

8265. (6172.) ANNUAL REPORT. 11. Said Board of Managers shall, on or before the first day of January in each year after the institution is open for the reception of inmates, make to the Governor a full and detailed report of their doings as such managers, and of the receipts and expenditures of said institution, with such other information relating to the condition of the institution and its inmates, and the results attained, as may be deemed interesting or useful to the public; which report shall be communicated by the Governor to the General Assembly at the next succeeding session thereof.

Reports as to receipts and payment to State, Sections 3016a, 3016b.

8266. (6173.) OPENING. 12. Whenever said institution, or either department thereof, shall have been so far completed as to

admit the reception of inmates intended to be committed thereto, the Governor shall make due proclamation of the fact, and, thereafter, it shall be lawful for the Board of Managers to receive into their care, custody or guardianship such inmates as may be committed or transferred to either of the departments of said institution, in the manner hereafter prescribed.

8267. (6174.) PENAL DEPARTMENT. 13. The Penal Department of said institution shall be used for the imprisonment, safe custody and reformation of such women and girls as shall heretofore have been convicted of criminal offenses and sentenced to the State Prison at Jeffersonville, and who are now undergoing imprisonment in that prison, in pursuance of such sentences; and also such women, and girls over the age of fifteen years, who may hereafter be sentenced to imprisonment in the Penal Department of the institution created by this act, upon conviction by any court of competent jurisdiction, of any crime for which such woman or girl might, prior to the passage of this act, have been sentenced to said State Prison.

8268. (6175.) CONVICTS FROM SOUTHERN STATE PRISON. 14. As soon as the Penal Department of the institution created by this act shall be ready for the reception of inmates, it shall be the duty of the warden of said State Prison, upon the order of the Governor, to transfer and convey to the institution created by this act all the female convicts who may then be confined in said prison, and deliver them to the Superintendent of said institution, with a certified statement in writing, signed by such warden, setting forth the name of each convict, the court by which, the offense of and for which she was convicted and sentenced, the date of the sentence, the term of court at which sentence was pronounced and the term for which such convict was sentenced, which certified statement shall be sufficient authority for the confinement of such convict in the institution created by this act for the portion of the term of such convict which may be and remain unexpired at the time when she shall be transferred to said institution as aforesaid.

8269. (6176.) FEMALE CONVICTS IN SOUTHERN STATE PRISON. 15. When the Penal Department of said institution shall be ready for the reception of inmates, as aforesaid, the Governor may, as to any or all of the female convicts who may then be confined, as aforesaid, in said State Prison, instead of making an order for their transfer, commute the sentences of said

convicts or any or either of them by substituting imprisonment in the Penal Department of said institution for the residue of the term for which they may have been respectively sentenced or for any less period of time.

8270. (6177.) SENTENCE OF FEMALE CONVICTS. 16. After the Penal Department of said institution shall have been proclaimed open for the reception of female convicts, as hereinbefore provided, it shall not be lawful for any court to sentence any female convict to the State Prison upon the conviction of any crime, but thereafter every female convict shall be sentenced to imprisonment in the Penal Department of the institution created by this act; and the term of imprisonment for which such female convict may be sentenced shall be any period of time for which she might, on conviction, have been sentenced to the State Prison at and prior to the passage of this act.

Diminution of time for good behavior, Sections 8238-8241.

The effect of this section is to modify previous statutes relating to the sentencing of women or girls to the State Prison. *Walton v. State*, 88 Ind. 9.

(Acts 1899, p. 511. In force April 1, 1899.)

8270a. INDETERMINATE SENTENCES AND PAROLES.

1. That the provisions of an act entitled "An act concerning the manner of procedure in the trial of certain felonies, and prescribing punishment therefor, appointing a commission on parole, and authorizing it to make rules for the government thereof, approved March 8, 1897," shall apply in the case of every girl and woman, fifteen years of age and over, hereafter tried for felony, in the State of Indiana, except as may be hereinafter provided.

See Section 1906a and Sections 8230-8232 for the act of 1879 referred to in this section; and see Section 8270e for attempted amendment of this section.

8270b. SENTENCE TO WOMANS PRISON. 2. Instead of sentencing girls or women to the State's Prison, courts shall, in case of a verdict or finding of guilty, sentence such criminals to the Womans Prison

8270c. COMMISSIONERS OF PAROLE. 3. The Superintendent of such prison, the Board of Managers, the Chaplain and the Physicians shall constitute the Board of Commissioners of Parole for such prison. The Superintendent shall be the President of such Board and the Clerk of such prison shall be Clerk of said Board.

8270d. AGENT, APPOINTMENT. 4. The Superintendent of such prison shall appoint the agent for such prison, and the Superintendent shall generally discharge all duties and exercise all authority conferred by said act of 1897, upon prison wardens.

(Acts 1901, p. 320. In force March 9, 1901.)

8270e. AMENDMENT TO ACT OF 1899. 1. That Section 1 of "An act supplemental to an act concerning the manner of procedure in the trial of certain felonies and prescribing punishment therefor, and appointing a commission on parole and authorizing it to make rules for the government thereof, approved March 6, 1899," be amended by adding thereto the following words:

That the provisions of said act shall apply in the case of every girl and woman fifteen years of age and over, hereafter tried for felony or who may now be serving a fixed term of imprisonment, except as may be hereinafter provided.

See Section 8270a for section said to be amended by this section, and there being doubt as to the validity of this section, it is set out as an independent act.

(1869 S., p. 61. In force May 13, 1869.)

8271. (6178.) WHEN SENTENCED TO STATE PRISON. 17. If at any time the Penal Department of said institution shall become so filled with female convicts that no more can be received therein for the time being, or until it shall be enlarged or relieved of some of its inmates, then the Governor shall proclaim the fact; and after such proclamation any court may sentence a female convict over the age of fifteen years to the State Prison, to the same extent and in the same manner as if this act had never been passed, and any female convict so sentenced, at any time thereafter, when she can be received in the Penal Department of the institution created by this act, may be transferred thereto, and imprisoned therein, in either of the modes hereinbefore provided for.

8272. (6179.) FEMALES OVER FIFTEEN MAY BE SENTENCED TO JAIL. 18. Nothing in the provisions of this act shall be construed as to prevent any court, upon the conviction of any woman or any girl over fifteen years of age, of any criminal offense, from sentencing such convict to imprisonment in the county jail of the proper county, under the provisions of any law in force in this State prior to and at the time of the taking effect of this act.

This section does not prohibit the sentencing of female convicts over fifteen years of age to county jails as provided by laws in force prior to the passage of this section. *Ruble v. State*, 52 Ind. 358.

8273. (6180.) **VICIOUS GIRLS RECEIVED FOR REFORMATION.** 19. Whenever said institution shall have been proclaimed to be open for the reception of girls in the Reformatory Department thereof, it shall be lawful for said Board of Managers to receive into their care and management in the said Reformatory Department, girls under the age of fifteen years, who may be committed to their custody, in either of the following modes:

First. When committed by any Judge of the Circuit Court, either in term time or in vacation, on complaint and due proof, by the parent or guardian, that, by reason of her incorrigible or vicious conduct she has rendered her control beyond the power of such parent or guardian and made it manifestly requisite that, from a regard to the future welfare of such infant, and for the protection of society, she shall be placed under such guardianship.

Second. When such infant shall be committed by such judge as aforesaid upon complaint by any citizen, and due proof of such complaint, that such infant is a proper subject for the guardianship of said institution, in consequence of her vagrancy or incorrigible or vicious conduct, and that from moral depravity or otherwise of her parent or guardian in whose custody she may be, such parent or guardian is incapable or unwilling to exercise the proper care or discipline over such incorrigible or vicious infant.

Third. When such infant shall be committed by such judge as aforesaid on complaint and due proof thereof, by the Township Trustee of the township where such infant resides, that such infant is destitute of a suitable home and of adequate means of obtaining an honest living, or that she is in danger of being brought up to lead an idle and immoral life.

8274. (6181.) **TERM OF INFANTS IN PENAL DEPARTMENT.** 20. All commitments to the Penal Department, made under the provisions of this act, shall be until the infant committed respectively attain the age of eighteen years, and all commitments to the Reformatory Department until they respectively attain the age of eighteen years, unless sooner discharged from either department by authority of the Board of Managers, or otherwise, as elsewhere provided in this act.

(Acts 1899, p. 322. In force March 9, 1899.)

8275. (E. S. 1998.) **COMMITMENTS.** 2. That commitments under existing law or laws which may be hereafter passed, to the Reformatory Department of the institution, mentioned in

Section 1 of this act, may be made to read for girls under eight nor over fifteen years of age.

8276. (E. S. 1999.) DETENTION AND RELEASE. 3. That all girls who may be now or hereafter committed to said reform school by virtue of any existing law or laws, which may be hereafter passed, shall be detained in or committed to said reform school until they respectively attain the age of twenty-one years: Provided, That the Board of Managers may release on parole all such girls at the age of eighteen years under such regulations as they may provide, which release shall remain in force during the good behavior of such girl or girls.

(1875, p. 73. In force August 24, 1875.)

8277. (6182.) DISCRETION TO SEND TO JAIL OR REFORMATORY. 21. If any girl under the age of sixteen years shall, under existing laws, or under those which may hereafter be enacted, be tried by any court of competent jurisdiction for any criminal offense for which she might, on conviction, be sentenced, for any period of time, to imprisonment in the proper county jail, it shall be competent for the court or jury by which the case may be tried at their discretion, on conviction, to substitute confinement in the Reformatory Department of the institution created by this act for imprisonment in the county jail; and such confinement shall be until the infant attains the age of eighteen years, unless sooner lawfully discharged by the Board of Managers or otherwise.

Females over fifteen years of age may be sent to the county jail when the law so provides. *Ruble v. State*, 52 Ind. 358.

(1869 S., p. 61. In force May 13, 1869.)

8278. (6183.) MAY BE SENT ON REPORT OF GRAND JURY. 22. If any girl under the age of fifteen years, shall be accused before the grand jury of any crime or misdemeanor, and the charge is supported by evidence sufficient to put the accused upon trial, the grand jurors, in their discretion, instead of finding an indictment against the accused, may make a return to the court that it appears to them that the accused is a suitable person to be committed to the guardianship of the Reformatory Department of the institution created by this act; and the court may, thereupon, order such commitment until the infant shall attain the age of eighteen years, unless sooner discharged as aforesaid.

if satisfied from evidence adduced that such commitment ought to be made: Provided, however, That the production of evidence may be waived by the parent or guardian.

8279. (6184.) MAY SEND TO REFORMATORY ON ARREST OF TRIAL. 23. If any girl under the age of fifteen years shall be arraigned for trial before any court of competent jurisdiction, charged with a violation of any criminal law of this State, the judge of such court may, with the consent of the accused, arrest at any stage of the cause any further proceedings on the part of the prosecution, and commit the accused to the Reformatory Department of said institution until she shall attain the age of eighteen years, unless sooner lawfully discharged by the Board of Managers or otherwise.

8280. (6185.) MAY SEND ON HABEAS CORPUS. 24. Whenever any girl under the age of fifteen years shall be imprisoned to await her trial on any charge punishable with imprisonment, such girl may be brought before the proper circuit judge, in term time or vacation, on a writ of habeas corpus, and shall be entitled to a private examination and trial before such judge, with a view to the question whether such infant ought to be committed to said institution. Only the parties to the case and the parents or guardian of the accused shall be admitted to such examination, unless one of the parents, the guardian, or the legal representatives of the accused shall demand a public trial; in which case all proceedings shall be in the usual manner. And upon such hearing, it shall be competent for such judge to make an order committing the accused to the Reformatory Department of said institution, until she attains the age of eighteen years, unless sooner lawfully discharged by the Board of Managers or otherwise.

8281. (6186.) ORDER OF COMMITMENT. 25. Whenever any infant under the age of fifteen years shall be committed to the Reformatory Department of said institution under the provisions of this act, the order of commitment shall be signed by the judge by whom it is made and authenticated by the Clerk of the proper court, under the seal of the court. Such order shall state the name and age of the infant and the section of the act under which she may be committed, without setting forth or mentioning the offense with which she may be charged; and no other or further record of the proceedings shall be made, unless demanded by the infant or her parent or guardian. If, however,

there shall be a regular trial and conviction, under Section 21 of this act (p. 6182), the usual record shall be made, and a certified copy of the judgment shall constitute the order of commitment.

8282. (6187.) SPECIFICATIONS IN COMMITMENT.

26. When a commitment shall be made under either of the specifications of Section 19 of this act (p. 6180), the order of commitment shall also specify under which of the clauses or specifications of said section such order is made.

8283. (6188.) REGULATIONS FOR DISCHARGE. 27.

The Board of Managers of said institution may provide by general regulations for the discharge of girls committed to the Reformatory Department of said institution under any section or provision of this act, and such discharge shall be made by the Superintendent with the approval of the Board.

8284. (6189.) ESCAPE. 28. Any person who may be committed to or confined in either department of said institution, and who may escape therefrom, may be arrested and returned to said institution by any officer or citizen, on the written order or request of the Superintendent or Board of Managers.

8285. (6190.) EMPLOYMENT AND INSTRUCTION—APPRENTICESHIP. 29. The Superintendent of said institution shall have power to place any girl committed to the Reformatory Department thereof at any employment, for account of the institution, or otherwise, and cause her to be instructed in such branches of useful knowledge as such Superintendent may think proper; and shall also have the power to bind out such infant, with her consent, during her minority, and may execute indentures of apprenticeship for such infant, which shall have the like force and effect as other indentures of apprenticeship made under the laws of this State. Every indenture of apprenticeship, so made, before the delivery thereof, shall be approved by the Board of Managers of said institution; which approval shall be endorsed on the indenture, and signed by the President of the Board, and a record of such approval shall be made in the minutes of the business transactions of the Board. In case any girl so apprenticed shall prove untrustworthy or unreformed the Superintendent may permit her to be returned to the institution to be held in the same manner as before such apprenticeship, whereupon the indenture may be canceled by order of the Board. If such infant shall have an unsuitable master or mistress the Superintendent

may, with the approval of the Board, take her back into the said institution with or without the consent of such master or mistress; and thereupon the indenture shall be canceled. All indentures so made shall be filed and kept in said institution and it shall not be necessary to file or record them in any other office or place, but the master or mistress of any girl so apprenticed shall, on request, be entitled to a copy of her indenture.

8286. (6191.) PAYMENT OF EXPENSES. 30. If any girl shall be committed to the Reformatory Department of said institution, upon the complaint or at the instance of her parent or guardian, the cost of transporting such girl to the institution, and the cost of her subsistence and clothing shall be paid by such parent or guardian, unless such parent is unable, by reason of his or her poverty, to pay the same, or unless such guardian has no funds, effects, or estate of such infant out of which the same could be paid. The order of commitment shall, in every such case, state whether the parent is able to pay the cost of the subsistence and clothing of the infant or whether the guardian has any estate or effects of the infant, out of which such costs can be paid. The Board of Managers shall, in every case, estimate and fix the amount to be paid, and the same shall be paid to the Superintendent quarterly in advance.

8287. (6192.) ESTIMATES—COUNTY TO PAY HALF. 31. Said Board of Managers shall, with the approval of the Governor, estimate and determine as near as may be the actual expense per annum of clothing and subsisting an infant committed to the Reformatory Department of said institution and include a statement of such estimated price in each annual report. One-half of the cost of keeping, according to such estimates, together with the entire cost of conveying such infant to the institution, shall be paid by the county from which such infant may be committed, except in cases where the cost of transporting such infant to the institution and her subsistence and clothing is chargeable to her parents or guardian under the last preceding section.

8288. (6193.) PAYMENT BY COUNTY. 32. The expense which any county may be liable to pay for the clothing and subsistence of any girl committed to the Reformatory Department of said institution, under the provisions of this act shall be paid by the Board of County Commissioners of such county into the State Treasury on a certified statement, in detail, of the amount

due therefor from such county being transmitted by the Superintendent of the institution, through the Treasurer of the State to the Auditor of the proper county.

8289. (6194.) PARENT'S PROCEEDINGS—DISCHARGE.

35. If a parent, guardian, or master of any infant committed to the Reformatory Department of said institution, or any person occupying the position of parent or guardian in fact, or any relation by blood or marriage, not more remote than first cousin to such infant shall feel aggrieved by the commitment of such infant to said institution, he may make written application to the Board of Managers of said institution for the discharge of such infant; which application shall be filed with the Superintendent, who shall inform the managers thereof; and the same shall be heard and determined by said managers at such time as they shall appoint for that purpose, not later than the next regular meeting of the Board. Such application shall state the grounds of the applicant's claim to the custody of the infant and the reasons for claiming such custody. Within ten days after the hearing of such application the Board of Managers shall make and announce their decision thereon; and if they shall be of the opinion that the welfare of such infant would be promoted by granting the application, they shall make an order to that effect; otherwise they shall deny the application. The applicant, upon the denial of the application (by first giving security for the payment of all costs, the security to be approved by the Clerk of the proper court), may commence an action in the Circuit Court of the county in which the institution may be situated, for the recovery of the custody of such infant, against the managers of the institution. The complaint in said action shall state the facts and manner of the commitment, the making of the plaintiff's application to the managers for the custody of such infant, and the denial of such application by said managers, as well as the ground upon which the plaintiff relies for the recovery of the custody of such infant. Said action shall be prosecuted in like manner as other civil actions; and the costs thereof shall be paid by the plaintiff, without reference to the result of the action, unless the court shall state, in the judgment, that refusal of managers to grant the application of the plaintiff was plainly unreasonable or that the original commitment was manifestly unnecessary and improper.

8291. (6196.) GOVERNOR MAY COMMUTE. 36. Whenever any female under the age of fifteen years shall be sentenced

by any court of competent jurisdiction to imprisonment in any county jail, it shall be lawful for the Governor, on the application of such infant, her parent, guardian or any other person, to commute her punishment, by substituting therefor the commitment of such infant to the Reformatory Department of the institution created by this act, during the minority of such infant, unless sooner lawfully discharged by the Board of Managers or otherwise.

8292. (6197.) PAY OF MANAGERS. 37. Said managers shall be allowed for their services, the sum of one hundred and sixty dollars per annum, payable quarterly, on the warrant of the Governor, out of the Treasury of the State; and no traveling expenses or other allowances shall be paid to said managers or any of them.

8293. (6198.) INSTRUCTION. 38. It shall be the duty of said Board of Managers to provide teachers and, as far as practicable, instruct the inmates of said institution in reading, writing and arithmetic.

(1873, p. 139. In force February 3, 1873.)

8294. (6199.) FURNISHING. 2. Whenever said institution, or any portion or department thereof, is ready to be furnished, the Board of Managers thereof shall present to the Auditor of State an itemized estimate of the articles needed for that purpose, with the estimated cost of each item or article, which estimate or statement shall be verified by the oath of the President of said Board. Upon the presentation of said estimate or statement to the Auditor of State, said Auditor shall, as soon as practicable, notify the Governor, Secretary and Treasurer of State of the filing of such statement, and if a majority of said officers shall be of the opinion that the proposed expenditure, or some part thereof, is necessary for the proper furnishing of said institution, or any part or department thereof, they shall direct, in writing, the Auditor of State to draw his warrant for the amount so estimated, or such part or portion thereof as they may approve, on the Treasurer of State, who shall pay the same to the President of said Board or to her order out of any money in the Treasury not otherwise appropriated.

8295. (6200.) CURRENT EXPENSES. 3. The current expenses of said institution shall be estimated for, allowed and drawn from the Treasury as follows: At the commencement of

each month the Superintendent of the institution shall prepare, and verify by her oath, an estimated itemized statement, in writing, of the amounts that will be required to meet the current expenses of such institution during such month, and present the same to the Auditor of State, who shall notify the Governor, Secretary and Treasurer of State thereof; and if a majority of said officers shall approve and allow said estimate, or a part thereof, they shall direct, in writing, the Auditor of State to draw his warrant on the Treasurer of State for the amount which may be allowed by said State officers, or by a majority of them; and said Treasurer shall pay said warrant out of any of the moneys in the Treasury not otherwise appropriated. Every such estimated itemized statement shall set forth the number of inmates in each of the departments of the institution and also the number of officers and persons employed therein.

8296. (6201.) SEMI-ANNUAL REPORT. 4. The Board of Managers and Superintendent of said institution shall, at the end of every period of six months (commencing with the first money which may be drawn from the Treasury on any estimate made under either of the previous sections of this act), make an itemized report of the expenditure of the money which may have been so drawn from the Treasury under this act; and the Auditor shall carefully examine such report, and if, in his opinion, any money shall have been improperly expended in the purchase of unnecessary articles or by paying too much therefor, or otherwise, said Auditor shall immediately notify the Governor, Secretary and Treasurer of State, who, in conjunction with such Auditor, shall immediately proceed to investigate the matter; and in accordance with the decision of a majority of these officers the amount shall be audited: Provided, however, That rendering an adverse decision upon any such amount or any part thereof, they shall notify the disbursing officer, and allow her to present such explanations or adduce such testimony as she may desire, in regard to the matter; and they shall have the same power to summon and require the attendance of witnesses as are given to the Criminal Courts of this State.

(Acts 1889, p. 322. In force March 9, 1889.)

8298. (E. S. 2000.) INSANE—TRANSFER. 4. If any girl committed to the "Girls Refôrm School," or any woman committed to the "Womans Prison," shall, while therein, become in-

sane, such woman or girl may be transferred to the "Asylum for the Insane," under the same rules and modes of procedure as those prescribed for other insane persons.

Admission to insane hospitals, Sections 3209-3249.

(FROM ACTS OF 1903.)

Section 1. Be it enacted by the General Assembly of the State of Indiana, That Section nineteen (19) of the above entitled act be amended to read as follows: Section 19. Whenever said institution shall have been proclaimed to be open for the reception of girls in the reformatory department thereof, it shall be lawful for said Board of Managers to receive into their care and management in the said reformatory department, girls under the age of fifteen years, who may be committed to their custody, in either of the following modes, to wit:

First. When committed by any Judge of a Circuit Court, either in term time or vacation, on complaint and due proof by the parent or guardian, that by reason of her incorrigible or vicious conduct, she has rendered her control beyond the power of such parent or guardian, and made it manifestly requisite that from regard to the future welfare of such infant and for the protection of society she should be placed under such guardianship.

Second. When such infant shall be committed by such Judge as aforesaid, upon complaint by any citizen, and due proof of such complaint, that such infant is a proper subject for the guardianship of said institution in consequence of her vagrancy or incorrigible or vicious conduct, and that from moral depravity or otherwise, of her parent or guardian, in whose custody she may be, such parent or guardian is incapable or unwilling to exercise the proper care or discipline over such incorrigible or vicious infant.

Sec. 2. All laws or parts of laws in conflict with this act are hereby repealed.

Sec. 3. Whereas an emergency exists for the immediate taking effect of this act, the same shall be in force from and after its passage.

(FROM GENERAL APPROPRIATION ACT, 1905.)

(H. 431. Approved March 7, 1905.)

For the Industrial School for Girls and Womans Prison, at Indianapolis: Regular. Maintenance, thirty-eight thousand dol-

lars; repairs, three thousand dollars; discharge, clothing and parole, seven hundred dollars; library, three hundred dollars. Specific. Repairs on heating plant, six thousand dollars.

(Acts 1905, page 106.)

An Act to amend section 13 of an act entitled "An Act authorizing and providing for the separation of the Indiana Industrial School for Girls from the Womans Prison, for the purchase of land and construction of buildings for the Industrial School for Girls, for appointing commissioners and making appropriations therefor, defining the plan to be pursued, authorizing the appointment of a Board of Managers and a Superintendent for the Girls Industrial School, repealing all laws in conflict therewith and declaring an emergency," approved March 11, 1903.

(S. 64. Approved March 1, 1905.)

AMENDMENT. Section 1. Be it enacted by the General Assembly of the State of Indiana, That Section 13 of the above entitled act be amended to read as follows:

INDUSTRIAL SCHOOL FOR GIRLS—SEPARATION—APPROPRIATION. Section 13. There is hereby appropriated from the State Treasury out of any funds not otherwise appropriated \$235,000.00, or so much thereof as may be necessary for the erection and equipment of the buildings and expense of the commissioners authorized by this act; \$75,000 of which shall be available on and after June 1, 1905, and the remaining \$160,000 shall be available on and after November 1, 1905. The said buildings shall be erected and equipped and made ready for occupancy as soon as practicable, and when completed, turned over to the Board of Managers of the Industrial School for Girls provided for in this act. When this shall have ben done by said commissioners, and final settlement made with the Auditor of State, then the duties of said commissioners shall end.

(FROM GENERAL APPROPRIATION ACT, 1907.)

(H. 713. Approved March 16, 1907.)

For the Woman's Prison, at Indianapolis: Regular. Maintenance, fourteen thousand dollars, and one hundred and fifty dollars per capita per annum for each person actually present over a daily average number of fifty-six inmates each month, which

sum is hereby appropriated out of any money in the treasury not otherwise appropriated; said excess amount to be approved by the Board of State Charities. Repairs, three thousand dollars.

(Acts 1907, page 139.)

Section 1. Be it enacted by the General Assembly of the State of Indiana, That the Board of Trustees of the Indiana Industrial School for Girls and the Indiana Womans Prison shall hereafter consist of four trustees. One additional trustee shall be appointed by the Governor to each of said boards as the same are now constituted, within thirty days from the taking effect of his act, and each of such additional trustees so appointed shall serve for a term of four years. The names of said board of control of the Indiana Industrial School for Girls and the Indiana Womans Prison shall each be known hereafter as the Board of Trustees of said institutions respectively.

Sec. 2. The name of the Indiana industrial school for girls is hereby changed to the Indiana girls' school.

Sec. 4. The Board of Trustees of the Indiana Womans Prison and of the Indiana Girls' School shall consist of women only. No other qualifications, except fitness, and those hereinbefore specified shall be considered in the making of such appointments. Each member of any such board of trustees hereafter appointed shall qualify by giving a bond with surety in the sum of ten thousand dollars to the approval of the Governor. At the meeting of said boards following the appointments provided for in section one (1) of this act, they shall proceed to elect a president, vice-president, treasurer and secretary, and thereafter annually the organization shall be at the April meeting of each of said boards. Such treasurer shall qualify by executing a bond in the sum of fifty thousand dollars, with surety to the approval of the Governor.

Sec. 5. Such trustees shall receive as compensation three hundred dollars a year each and their reasonable expenses, not to exceed one hundred and twenty-five dollars a year each, which shall be paid quarterly as other expenses of the institutions are paid.

Sec. 7. In the purchase of all supplies that enter into the maintenance of any of the institutions covered by this act, it shall be the duty to invite competitive bids through sealed proposals to the president of the board of each institution, and the lowest and best responsible bidder shall be awarded the contract, and

the same provision shall apply to the construction and equipment of all buildings for any such institution. Public notice of such bids shall be given by publication in the two leading newspapers in the county where such institution is located, and otherwise if considered beneficial. If such board deems it advisable and in the interest of economy to buy certain articles in quantity to last for a longer period, it shall have the right to do so. Such fact, however, shall be particularly stated in the notices. Blank bids shall be furnished for all applicants, but bids shall not be rejected because not contained on such form. Any or all bids may be rejected.

FIRST REPORT
OF THE
BOARD OF TRUSTEES
OF THE
Indiana Girls' School

FOR THE
Six Months Ending September 30, 1907

To the Governor

THE STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
February 14, 1908. }

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, February 19, 1908. }

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

February 19, 1908.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, February 19, 1908.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer February 20, 1908.

HARRY SLOUGH,
Clerk Printing Bureau.

BOARD OF TRUSTEES.

EMMA LEE ELAM.....	Indianapolis
ISABELLE J. BELL	Kokomo
LOTTIE W. CALDWELL	Lafayette
SARAH E. CAMPBELL.....	Anderson

OFFICERS AND EMPLOYES.

SUPERINTENDENT,
SARAH L. MONAGOMERY.

CHARLOTTE DYE.....	Assistant Superintendent
ELIZABETH STEVENSON.....	Nurse
ALMA HARRISON.....	Director
LELLA ROSSETTER.....	Director
IDA B. WOOD.....	Director
MRS. E. A. MORRISON.....	Director
MRS. J. A. LUDINGTON.....	Director
MILDRED WINCH.....	Director
SARA E. SMITH.....	Director
CLAUDIA GOODPASTURE.....	Industrial Teacher
MRS. RENE BRIGGS.....	Industrial Teacher
MRS. OLA WILSON.....	Industrial Teacher
MARGARET YULE.....	Industrial Teacher
ELLA GERARD.....	Industrial Teacher
MRS. J. F. MORPHEW.....	Industrial Teacher
ALICE K. MAGNER.....	Industrial Teacher
MRS. E. V. ADER.....	Industrial Teacher
EMMA HART.....	Industrial Teacher
MRS. R. M. DERBYSHIRE.....	Industrial Teacher
MRS. MAUDE ESTEP.....	Industrial Teacher
MISS VINA GRIMME.....	Industrial Teacher
FRANCES BRANAMAN.....	Principal of Schools
DELLA M. CARLEN.....	School Teacher
ANNA M. BAER.....	School Teacher
EVA C. JACKSON.....	School Teacher
DR. MARTHA J. SMITH.....	Physician
NELLIE JOHNSTON.....	Secretary
MRS. GEO. HAND.....	Dressmaker
NAN B. WOOD.....	State Agent

OTHER EMPLOYES.

J. F. MORPHEW.....	Farmer
HUGH McCAFFERY.....	Engineer
P. E. MORAN.....	Assistant Engineer
JOEL C. LEWIS.....	Nightwatch
CHAS. DICKERSON.....	Night Engineer
E. V. ADER.....	Assistant Farmer
GEORGE HAND.....	General Work

REPORT OF BOARD OF TRUSTEES.

To the HON. J. FRANK HANLY, Governor of Indiana:

We submit the first report of the Indiana Girls' School for the six months ending September 30, 1907.

The General Assembly in 1903 passed an act to establish the Industrial School for Girls on a farm within ten miles of Indianapolis, with suitable buildings, on the cottage plan, and appropriated one hundred fifty thousand dollars (\$150,000) for this purpose. A commission consisting of four men was appointed by Ex-Governor Durbin to select the farm and erect the buildings. A farm of one hundred twenty-seven and a half acres, situated eight miles west of Indianapolis, was purchased and plans selected for the buildings, but it was found there was not sufficient money to erect modern fireproof buildings, as the law provided they should be, so the appropriation was allowed to revert, and the next General Assembly, in 1905, was asked for more money to erect the buildings. Two hundred and thirty-five thousand dollars (\$235,000) was appropriated for the erection and equipment of the buildings. The commission completed their work in February, 1907. These buildings consist of seven cottages, each to accommodate thirty girls and the necessary officers; a school house, a power house—the latter equipped. The construction is of brick and stone with cement floors on the porches and in the kitchens and laundries. The buildings are equipped with solid porcelain bath, toilets and laundry tubs, with tile floors. The buildings have hardwood floors throughout, heated by steam and lighted by electricity. Each cottage is provided with small rooms so that each girl has a room to herself except the one used for the children. In this one, there are a few single rooms, and an open dormitory which the young girls occupy. The buildings are situated on a hill in a campus containing about thirty acres, with a number of fine forest trees, making it possible to have a beautiful campus when time and money have completed the work needed. The General Assembly of 1907 changed the name of the school to the "Indiana Girls' School," and appropriated eighteen thousand dollars to furnish and equip the buildings and transfer the girls.

April 1, 1907, a Board of Trustees consisting of four women was appointed to take charge of the affairs of this school: Mrs. Lottie W. Caldwell, for one year; Mrs. Isabelle J. Bell, two years; Mrs. Sarah E. Campbell, three years; Mrs. Emma Lee Elam, four years. The work of furnishing and equipping the institution required considerable time before the girls could be moved, and much that should have been done for comfort and convenience was omitted.

Miss Sarah L. Montgomery was elected Superintendent of the School, and took charge July 1, 1907. During the month of July, two hundred twelve girls were transferred from the old institution to this country home, where new conditions existed, with new supervision. There was much to be learned by experience, both for the officers and girls. With no bars and no fence, there was an opportunity for liberty which proved very attractive, and a number of girls ran away, but all were returned. The experiment is still young, and the plans incomplete, but it is hoped to classify these girls so that those who are suited to live together can be placed in a cottage where there may be a family life that can more nearly approach the best home life, which is the ideal to be always kept in mind.

Girls are committed by the courts to the Indiana Girls' School until they are twenty-one years old. The age limit is from eight to eighteen years, and all ages within this limit are represented. The result is that we have a sort of children's home for young girls innocent of crime, mixed with a reformatory school for vicious girls, grown almost to womanhood.

The work looking toward the completing of the institution has been carried forward, but the progress has been slow. Cement walks have been placed in the campus in the most needed parts, but much more will be required before we are fully equipped with walks. The question of sufficient water supply has been most vexing, and is still unsolved. Driven wells have been provided, but the supply of water is not of sufficient quantity, or a very high quality. With the specific appropriation we have erected a cedar water tank, holding twenty-two thousand gallons, costing \$1,868. The extended equipment for the power house, for which a specific appropriation of \$5,750 was made, has been put in, and is working satisfactorily. A new iron fence has been placed in front of the campus, and some grading has been done, but the work has not been completed. An orchard of about

six hundred trees and a quantity of small fruits were planted in April, and have done fairly well. Five hundred thirty-one and a half bushels of wheat were raised on the farm and turned into the mill for flour.

A garden was raised and was of considerable help in furnishing food for the family.

There was a per capita appropriation of two hundred dollars for maintenance from the time the girls were moved until the beginning of the fiscal year, which was not adequate to the needs, and the bills in excess of this appropriation were paid by the Governor from his emergency fund, to the amount of \$3,388.87.

An agent is constantly employed to place the girls in homes and to visit them after they are placed. From July 17 to September 30, twenty-three have been placed in homes; five have been sent to their own homes, and twelve have been returned to the school.

Number of girls in school July 15.....	212
Number of girls received on new commitments.....	17
Number of girls returned.....	12
Total	241

The efficiency of the work is greatly impaired by the lack of sufficient funds to carry on the practical work needed in such a school. We are obliged to omit some of the most desirable industries for lack of funds for equipment and officers to carry them on. We sincerely hope that the next General Assembly will provide the means to extend this work so that the Indiana Girls School may be the equal, if not superior, to any school of its class in the country.

The Board of Trustees has estimated and determined the actual expense per annum of subsisting an infant committed to the Indiana Girls School, as required by Burns' R. S. 1901, section 8281, at \$163.50. The counties from which the girls come pay one-half of this amount.

FINANCIAL STATEMENT.

TOTAL APPROPRIATIONS.	
Total appropriations	\$9,084 33
Farm products	\$1,457 75
Paid by governor from emergency fund.....	\$3,388 87
Daily attendance	216.827
Cost per capita, average.....	\$163 50
Unused specific appropriations.....	\$55,775 99

The contract has been let for the erection of two cottages for the use of men employed, for the sum of \$4,000. Bids for a horse barn have been taken, but the contract has not been awarded. Money was provided for the erection of an ice plant and store house and cow barn, which we hope to complete during the next few months.

For a more detailed report of the work done by the institution, we submit the report of the Superintendent, Secretary and Physician.

We are under many obligations to the Governor and other State officials and many friends for their support and assistance in carrying on this work during the past year.

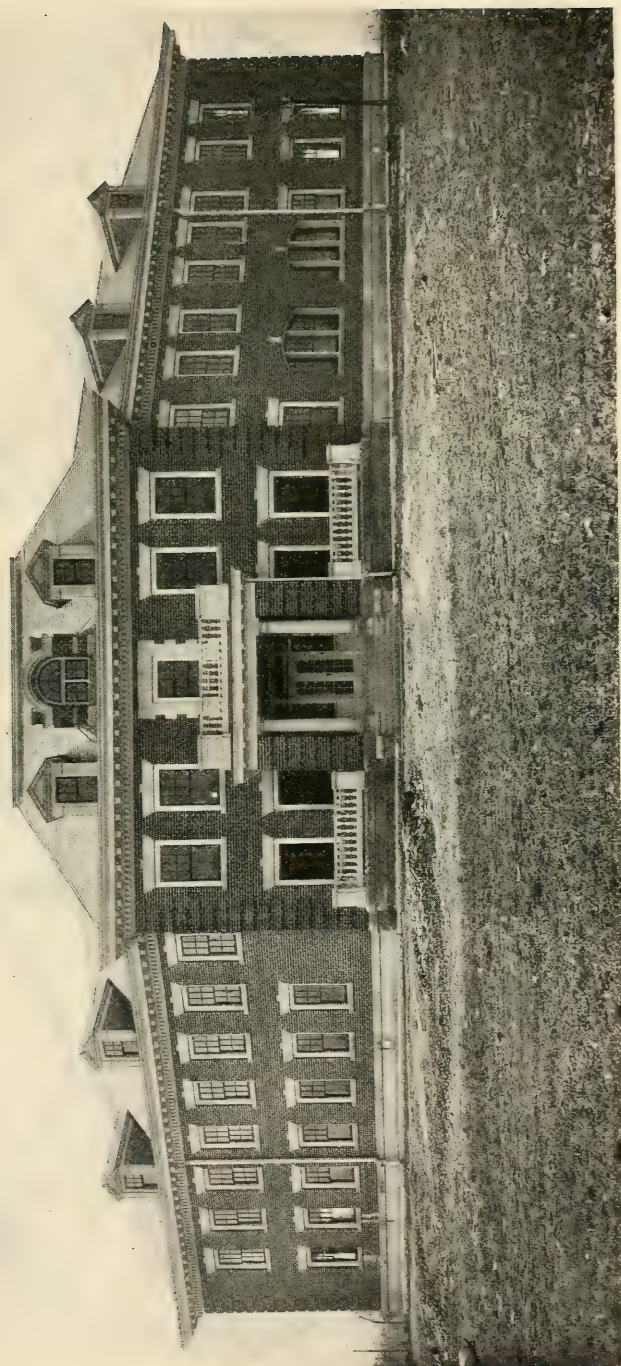
Respectfully submitted,

EMMA LEE ELAM, President.

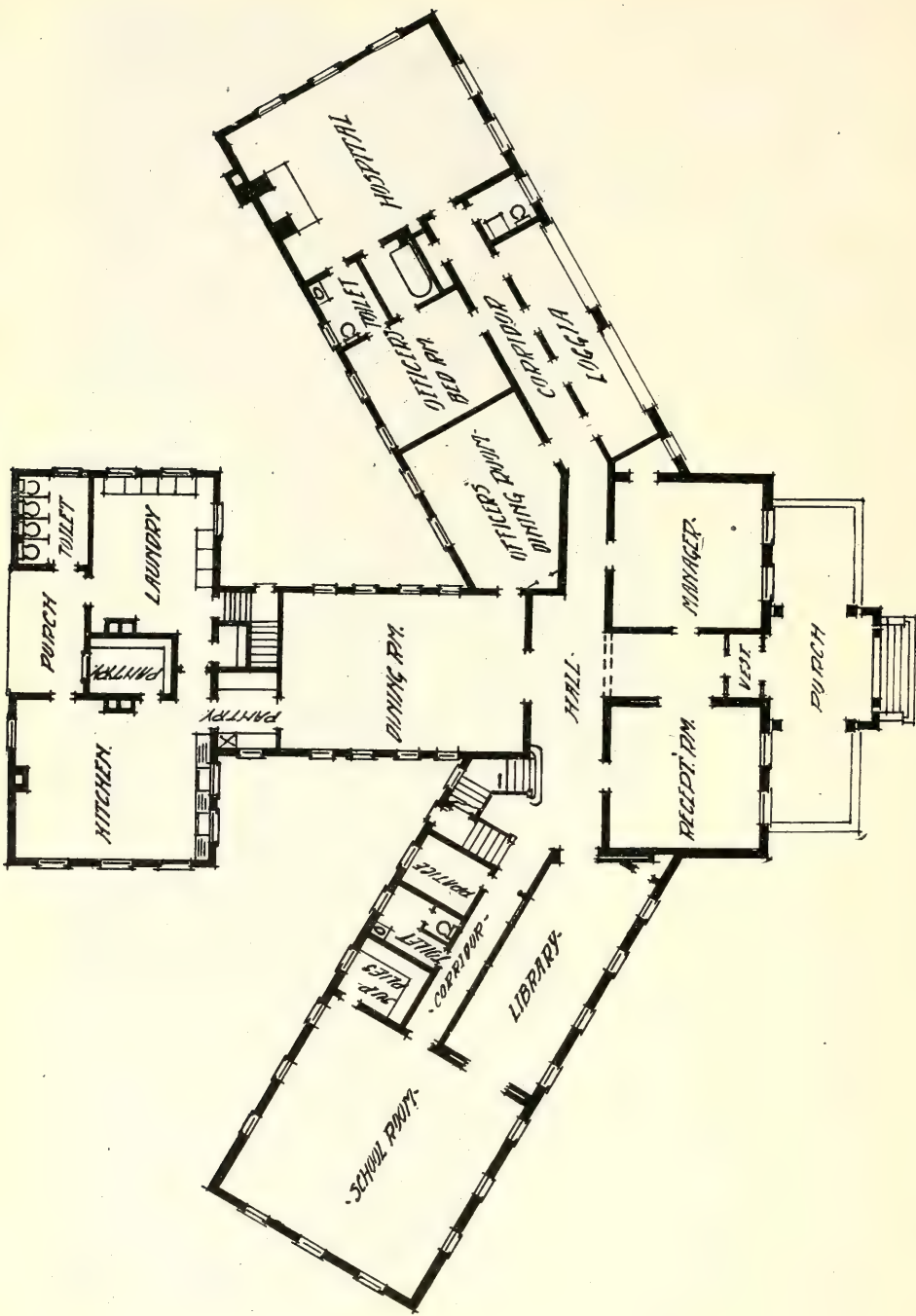
ISABELLE J. BELL, Vice-President.

LOTTIE W. CALDWELL, Treasurer.

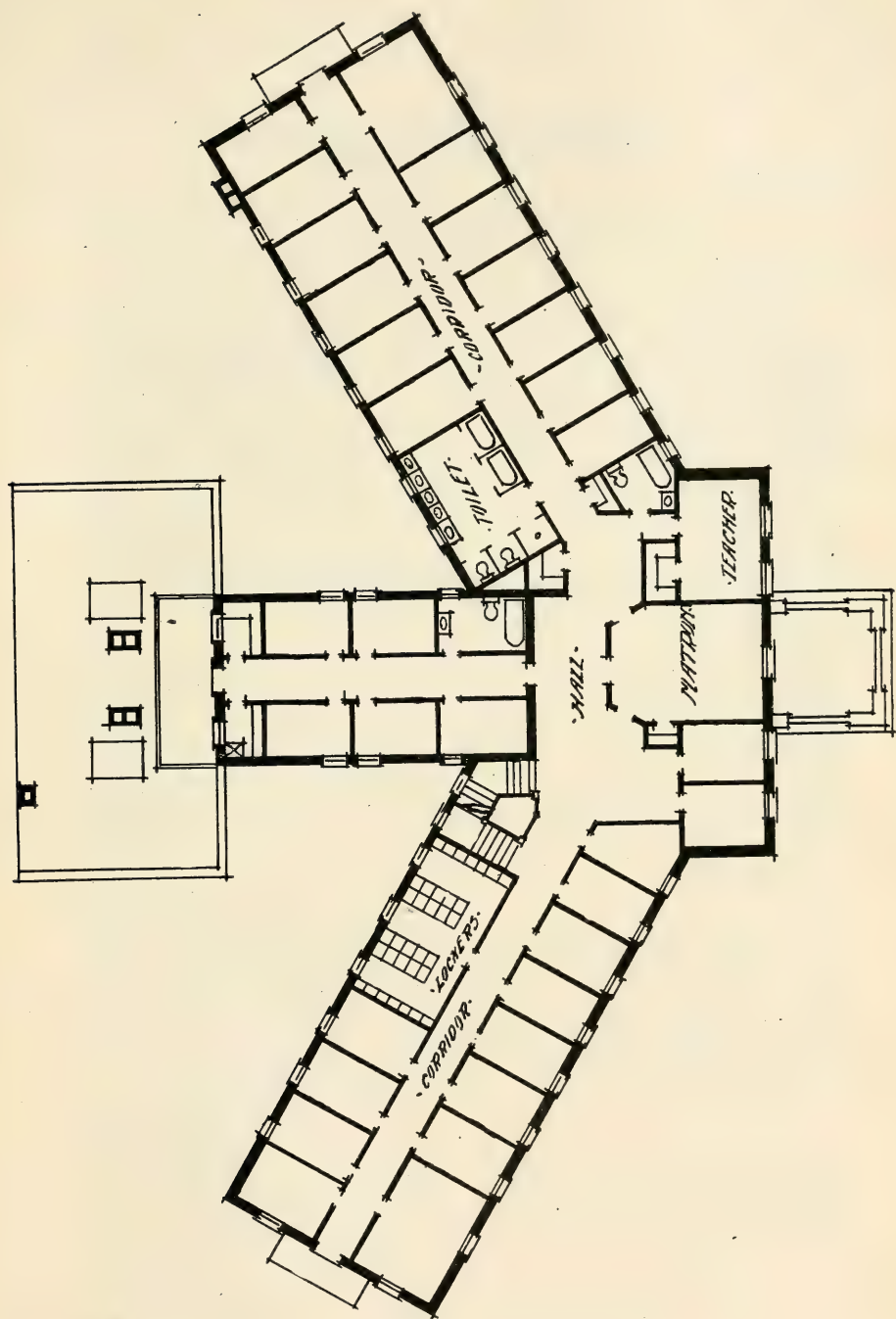
SARAH E. CAMPBELL, Secretary.



COTTAGE STYLE D.



FIRST FLOOR COTTAGE, STYLE D.



SECOND FLOOR COTTAGE, STYLE D.

FINANCIAL REPORT

OF THE COMMISSION APPOINTED TO ERECT BUILDINGS FOR THE INDIANA GIRLS SCHOOL.

Under the act of 1903, Governor Durbin appointed a Commission for the selection of a site and the erection of buildings for the Indiana Industrial School for Girls. The Commissioners so appointed, John Stout (Paoli, Ind.), Augustus M. Kuhn, E. M. Campbell and Eudorus M. Johnson of Indianapolis, organized by the selection of officers as follows: Governor Durbin, chairman; Eudorus M. Johnson, secretary; E. M. Campbell, treasurer. The site selected and purchased was 125 acres northwest of the city; cost, \$10,925. Clarence Martindale of Indianapolis was selected architect. The Commission erected:

Seven cottages, one schoolhouse and one power house at a cost of	\$226,891 34
Cost of land, as above.....	10,925 00
Architect's fee	6,901 33
Superintendent's salary	3,017 98
Commission's expenses	2,899 24
Switch to the Big Four Railway.....	2,189 62
Miscellaneous	2,388 73
	<hr/>
	\$255,213 24

Governor Hanly succeeded Governor Durbin in January, 1905. Wm. G. Oliver of Franklin, Indiana, was selected to fill the vacancy occasioned by the resignation of Mr. Stout, and served until the completion of the buildings.

Respectfully submitted,

E. M. JOHNSON,
Secretary.

SUPERINTENDENT'S REPORT.

To the Board of Trustees of the Indiana Girls School:

I hereby submit the report of the Indiana Girls' School from July 17, 1907, to September 30, 1907, together with the reports of the Secretary, Physician and Parole Agent.

The children were moved to the new school in the country July 17, 1907. More disadvantageous conditions for beginning could not have been imagined, but out of the perplexities of that time order gradually emerged.

In each of the seven cottages on the ground was placed a family of children ranging from twenty-five to thirty-five in number. According to the plan of the Board of Trustees, three officers took charge of each family. The director, as the head of the house, is responsible for its entire management, and is in personal charge of the children; the housekeeper in charge of the dining-rooms and kitchen and the groups of children taking that training; the supply officer in charge of laundry work and the children taking training; also substitutes for the other officers in the house when they are off duty.

The children are trained in household duties according to the following plan:

Three are detailed to take kitchen training for four months.

Two to take dining-room training for two months.

Four to learn laundry work in the mornings and four others in the afternoons for three months.

The remaining children in the family, under the care of the director, learn general housekeeping and plain sewing.

It is hoped in time to have various industries in addition to that of dressmaking, already established, as opportunities for training.

The domestic training occupies one-half of the day, the regular grade work in the day school the remaining half—one-half of the children being in the school in the morning, and the other in the afternoon.

When garden and farm work are in progress, groups of children assist in such work as they are fitted to do.

At first it was pathetic to see these young-old women try to play—a solemn walk was as near as they could accomplish it; but as fresh country air gave increased vigor, they were able to work and play as young people should, and the improved appetites gave rather alarming testimony to the fact of their better health and spirits.

In addition to as much outdoor life as possible, I have insisted on the children spending half an hour quietly in their rooms every day. The nicely adjusted factors of work and play, exercise and quiet, so essential to the proper development of children, are of especial significance here, where the great majority suffer from overstrained emotional life and pitifully warped nervous systems. To keep the daily life simple, sane and sweet, so that nervous and emotional, but above all, volitional balance is restored, and tendencies to right conduct set up and fostered, are the engrossing problems in this phase of child-saving work.

Fortunately, country life, with its attendant opportunities for outdoor work, and the cottage system, with its increase of individual training and emphasis of the values inherent in individual life and service, are essentials to the accomplishment of the end contemplated by the State in establishing such a school as this.

We try to have the children understand that they are not here for punishment, but for training, so that they may go out and labor truly to make their own living, become noble and useful women, and, we hope, worthy citizens of the State of Indiana.

Against the background of disheartenment and discouragement of the beginnings in July, there stands in sharp relief the improvement in physical and moral health of the children; above all, there remains with me an abiding appreciation of the work of officers and employes, every one of whom stood by me with a courage and nobility no words of mine can convey. To their singleness of purpose and devotion is due the daily change in the children, and this, with a certain consciousness of sympathetic support and good will on the part of the public, enables us to look hopefully to the future.

Respectfully,

S. L. MONTGOMERY,
Superintendent.

REPORT OF VISITING AGENT.

To the Superintendent:

I submit below my report of visits and investigations made for the period, from July 16 to September 30, 1907.

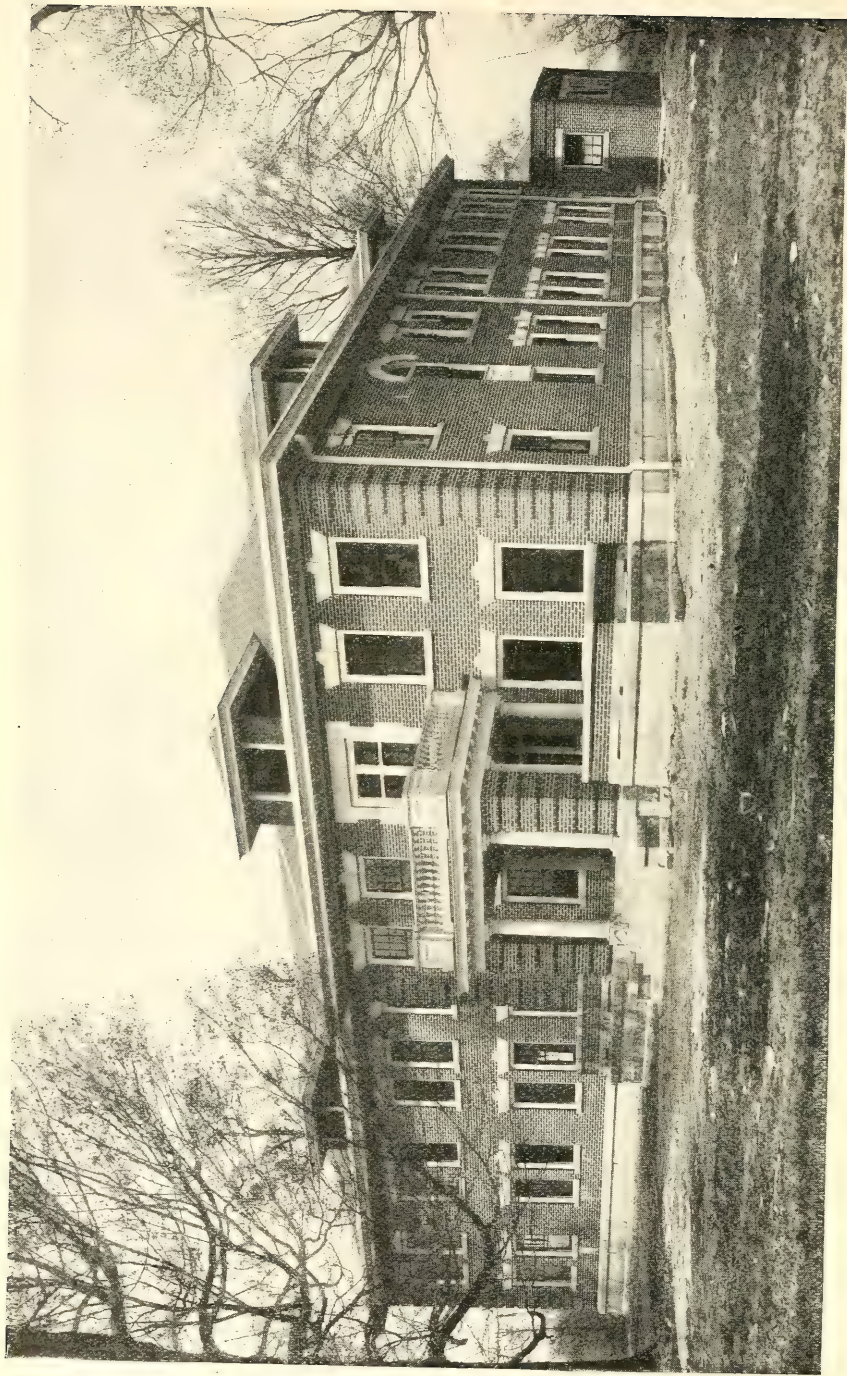
From July 16 to July 30 nine children were placed in homes. Five children were returned to the school, and three homes were investigated.

During the month of August eight children were placed in homes, seven children returned to the school, and nineteen visits made to children already placed in homes. Six homes were investigated.

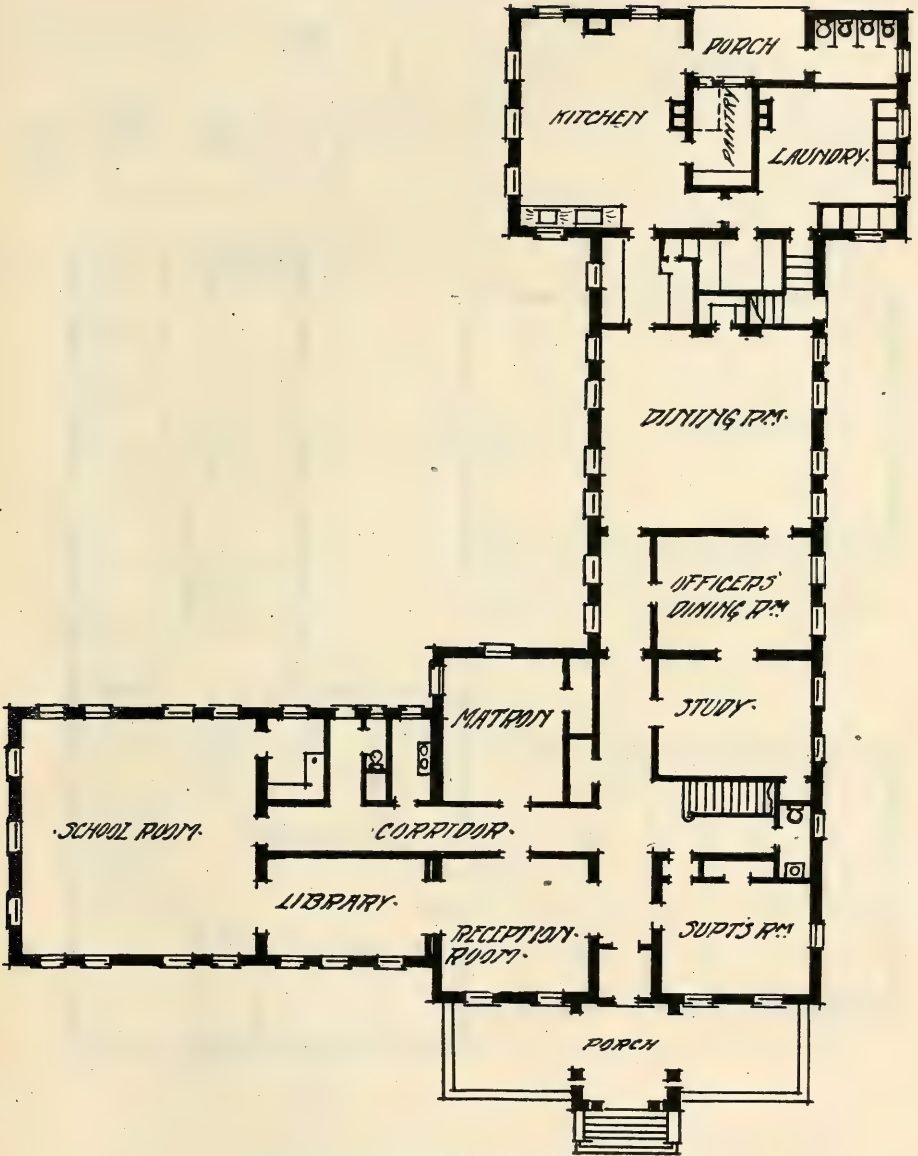
During the month of September twelve children were placed in homes, nine children were returned to the school, and thirty-five visits made to children already placed in homes.

Respectfully submitted,

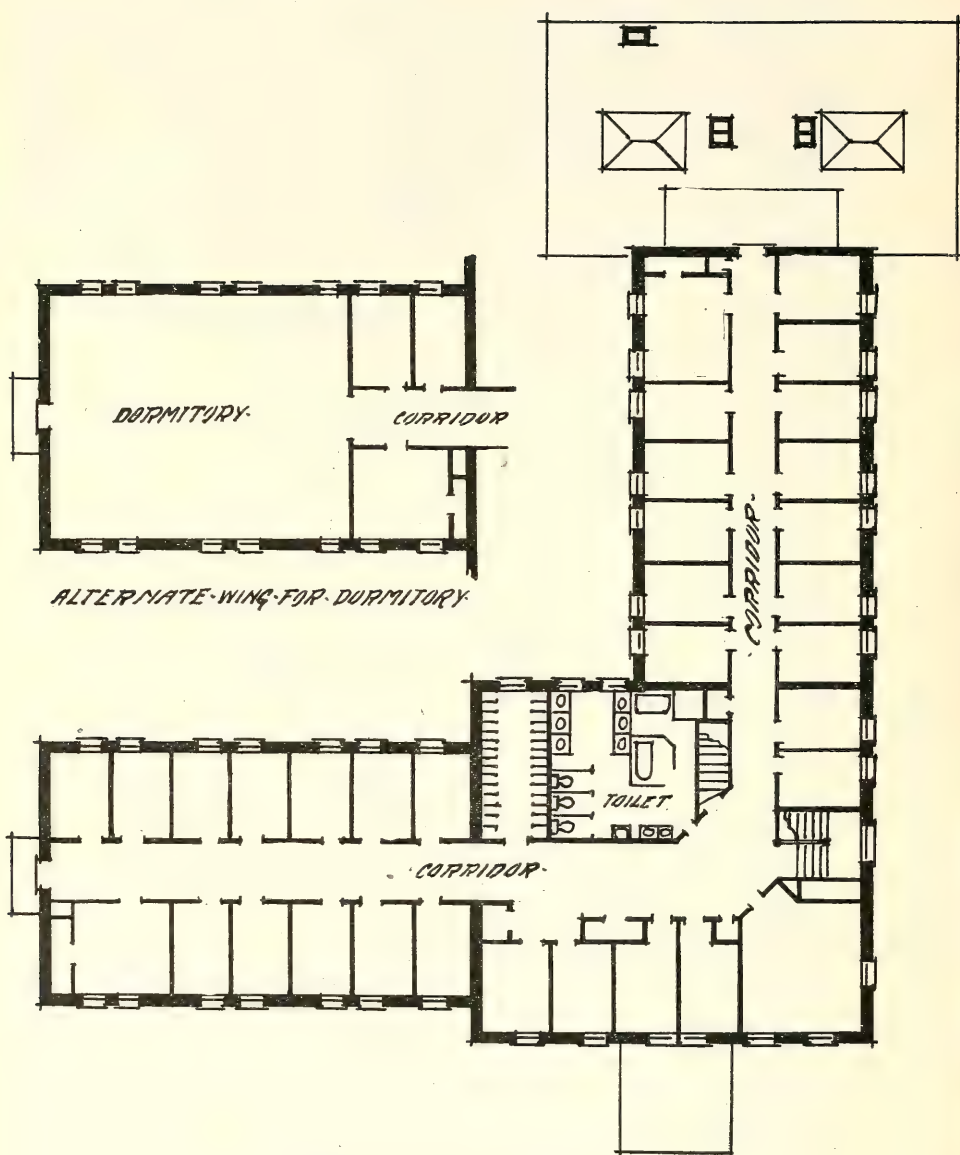
NAN B. WOOD,
Visiting Agent.



COTTAGE, STYLE B.



FIRST FLOOR COTTAGE, STYLE B.



SECOND FLOOR COTTAGE, STYLE B.

REPORT OF PHYSICIAN.

To the Board of Trustees of the Indiana Girls' School:

Ladies—The following report is respectfully submitted for the hospital from July 17 to September 30, 1907, the end of the fiscal year..

The total number of cases of illness treated in the hospital (including minor ailments) was sixty-five.

The number of cases treated in the hospital for each month was as follows:

July 17 to 31.....	36
August	57
September	68

The following diseases were treated in the hospital from July 17, 1907, to September 30, 1907:

<i>Diseases.</i>	<i>Cases.</i>	<i>Diseases.</i>	<i>Cases.</i>
Anemia	5	Hay fever	1
Syphilis (primary)	1	Herpes-Zoster	1
Syphilis (secondary)	2	Chronic pharyngitis	1
Gonorrhoea	3	Acute bronchitis	1
Urticaria	4	Muscular rheumatism	1
Dysentery	1	Tuberculosis	1
Acute diarrhea	8	Sprained ankle	1
Fecal impaction	3	Sprained arm	1
Follicular tonsilitis	1	Acne of face	1
Acute colds	5	Corneal ulcer	1
Pregnant	2	Rhus dermatitis	2
Biliousness	1	Scabies of body.....	2
Pediculi capitis	3	Local treatments	8
Inflamed eye	2	Hemorrhoids	1
Scrofula of neck.....	1		

Thirty-five professional visits were made to the school from July 17 to September 30, 1907.

The general health has been excellent.

Thanking the Board of Trustees and Superintendent and all officers for the kindness and consideration I have received at their hands, I remain,

Respectfully,

MARTHA J. SMITH,
Attending Physician.

REPORT OF SECRETARY.

To the Superintendent:

The following pages will show the financial and statistical tables of the Indiana Girls School for the period from July 16 to September 30, 1907.

Respectfully,

NELLIE JOHNSTON,
Secretary.

FINANCIAL TABLES.

EXHIBIT A.

SHOWING AMOUNTS RECEIVED FROM THE STATE TREASURY
ON WARRANTS OF THE STATE AUDITOR FOR EXPENSES
FROM APRIL 1, TO SEPTEMBER 30, 1907.

May	\$2,632 35
June	4,580 57
July	12,734 60
August	11,597 98
September	5,911 71
<hr/>	
Total	\$37,457 21

EXPENDITURES.

Administration—Salaries and Wages.

Trustees	\$300 00
Officers	1,105 85
Teachers	265 00
Industrial teachers	1,850 62
Other employes	2,236 38
Chapel	24 00
<hr/>	
	\$5,781 85

SUBSISTENCE.

Fresh meat	\$190 19
Salted meats and lard.....	212 32
Butter, eggs and poultry.....	236 58
Vegetables	228 90
Fresh fruits	83 43
Dried fruits	42 05
Canned goods	167 46
Breadstuffs, beans, cereals, etc.....	648 73
Vinegar and syrup.....	108 16
Tea, coffee and sugar.....	269 67
Milk	404 83
Other food supplies.....	110 65
<hr/>	
	\$2,702 97

CLOTHING, ETC.

Clothing	\$560 56
Shoes	201 68
Tailor and sewing room supplies.....	104 13
<hr/>	
	\$866 37

EXHIBIT A—Continued.

SUNDRIES.

Library, newspapers and periodicals.....	\$17 05	
Furniture, fixtures, bedding, etc.....	178 54	
Laundry supplies, soaps and other cleaners.....	279 11	
Medicines, instruments and hospital supplies.....	61 71	
Postage, telegraph, telephone, etc.....	72 20	
Freight and transportation.....	589 66	
Stable, farm, garden, provender, etc.....	139 16	
Ice	42 00	
Music and amusements.....	12 17	
Fuel	1,295 03	
Engineer's supplies	6 25	
Other classifications	406 10	
Ordinary repairs and minor improvements.....	33 03	
		<hr/>
		\$3,132 01

RECAPITULATION.

Administration	\$5,781 85	
Subsistence	2,702 97	
Clothing	866 37	
Sundries	3,132 01	
		<hr/>
Total maintenance		\$12,483 20
Furnishing account		18,579 71
Hennery and piggery.....		184 76
Grading walks, drives, etc.....		1,837 64
Standpipe		1,868 00
Live stock, vehicles, implements, etc.....		2,503 90
		<hr/>
Total expenditures		\$37,467 21

STATISTICAL TABLES.

TABLE No. 1.

SHOWING THE NUMBER OF GIRLS RECEIVED AND DISCHARGED
FROM JULY 17, TO SEPTEMBER 30, 1907.

Number enrolled July 17, 1907.....	212
Number received on commitment.....	17
Number received from ticket-of-leave.....	12
<hr/>	
Total number received during period.....	241
Number released on ticket-of-leave.....	26
Number released on final discharge.....	2
<hr/>	
Total number released	28
Total number enrolled September 30, 1907.....	213
Of the 17 received, were white.....	17
Of the 17 received, could read and write.....	17
Highest number present at any time during period.....	220
Lowest number present at any time during period.....	212
Average number present during period.....	216.827
Total number received since opening.....	1,661
Total number of deaths since opening.....	33
Number out on ticket-of-leave.....	226

TABLE No. 2.

SHOWING NATIVITY OF GIRLS RECEIVED FROM JULY 17, TO
SEPTEMBER 30, 1907.

Indiana	14
Kansas	1
Illinois	1
Ohio	1
<hr/>	
Total	17

TABLE No. 3.

SHOWING AGES OF GIRLS AT COMMITMENT.

Twelve	2
Thirteen	2
Fifteen	6
Sixteen	6
Eighteen	1
<hr/>	
Total	17

TABLE No. 4.

SHOWING THE NUMBER OF GIRLS RECEIVED FROM THE DIFFERENT COUNTIES FROM JULY 17, TO SEPTEMBER 30, 1907.

Allen	1	Madison	3
Bartholomew	1	St. Joseph	1
Delaware	2	Vigo	2
Elkhart	1	Wayne	1
Howard	2	<hr/>	
Kosciusko	1	Total	17
Marion	2		

TABLE No. 5.

SHOWING COUNTIES FROM WHICH GIRLS HAVE BEEN RECEIVED SINCE THE OPENING OF THE INSTITUTION.

Adams	3	Delaware	34
Allen	64	Dekalb	14
Bartholomew	26	Dubois	4
Benton	5	Elkhart	32
Blackford	13	Fayette	6
Boone	16	Fountain	8
Carroll	2	Franklin	1
Cass	22	Floyd	17
Clay	14	Fulton	4
Clinton	15	Gibson	9
Clarke	15	Grant	21
Crawford	2	Greene	11
Daviess	21	Hamilton	17
Dearborn	20	Hancock	3
Decatur	27	Harrison	3

TABLE No. 5—Continued.

Hendricks	5	Porter	6
Henry	17	Posey	7
Howard	56	Pulaski	4
Huntington	19	Putnam	9
Jackson	12	Randolph	10
Jasper	5,	Ripley	1
Jay	4	Rush	6
Jefferson	21	Scott	1
Jennings	6	Shelby	16
Johnson	12	Spencer	6
Knox	21	Starke	5
Kosciusko	28	Steuben	11
Lake	12	St. Joseph	29
Lagrange	4	Sullivan	17
Laporte	15	Switzerland	3
Lawrence	14	Tippecanoe	43
Madison	56	Tipton	15
Marion	355	Vanderburgh	54
Marshall	5	Vermillion	2
Martin	4	Vigo	83
Miami	11	Wabash	8
Monroe	13	Warren	2
Montgomery	39	Warrick	6
Morgan	10	Washington	8
Newton	3	Wayne	51
Noble	12	Wells	9
Orange	1	White	3
Owen	5	Whitley	9
Parke	14	United States	3
Perry	3		
Pike	3	Total	1,661

TABLE No. 6.

SHOWING SOCIAL CONDITION OF PARENTS OF GIRLS REMAINING
SEPTEMBER 30, 1907, AT TIME OF COMMITMENT.

Parents living together	44
Parents living but separated:.....	32
Father dead, mother widow	23
Mother dead, father widower	19
Parents dead	27
Stepfather	25
Stepmother	27
Stepfather and stepmother.....	7
Illegitimate	9
Total	213



SCHOOL.

COTTAGE, STYLE B.

TABLE No. 7.

SHOWING POPULATION SINCE ORIGIN OF INDUSTRIAL SCHOOL
FOR GIRLS.

- a. Total received each year on commitment.
b. Total number discharged, died or withdrawn each year.
c. Total number enrolled at the end of each year.
d. Daily average attendance since 1890.

<i>Years.</i>	<i>A.</i>	<i>B.</i>	<i>C.</i>	<i>D.</i>
1873.....	15	..	15	
1874.....	84	15	84	
1875.....	57	14	127	
1876.....	57	28	150	
1877.....	40	53	138	
1878.....	44	32	147	
1879.....	52	59	147	
1880.....	41	45	148	
1881.....	52	58	148	
1882.....	51	62	144	
1883.....	34	41	143	
1884.....	48	55	142	
1885.....	40	33	132	
1886.....	38	48	177	
1887.....	31	51	128	
1888.....	44	18	133	
1889.....	48	22	144	
1890.....	43	24	151	152.1
1891.....	42	20	143	142.5
1892.....	48	56	144	134.3
1893.....	45	36	148	146.3
1894.....	36	16	152	154
1895.....	60	29	180	169
1896.....	30	19	202	189.7
1897.....	47	55	206	206.3
1898.....	46	75	200	206.6
1899.....	39	80	180	184.3
1900.....	35	55	187	182.6
1901.....	44	107	144	166.5
1902.....	41	40	175	156.9
1903.....	53	34	207	183.5
1904.....	51	75	203	207.6
1905.....	69	55	239	214
1906.....	85	84	260	253.1
1907.....	73	158	213	237.413

TABLE No. 8.

SHOWING WORK DONE BY THE GIRLS FROM JULY 17 TO SEPTEMBER 30, 1907.

Sewing.

Gowns	100
Dresses	215
Skirts	91
Drawers	200
Aprons	116
Napkins hemmed	436
Tablecloths	100
Dresser scarfs made	233
Pillow cases made	117
Pillow covers made	77
Silence cloths	42
Waists	16

Mending.

Skirts	111
Dresses	139
Drawers	65
Stockings, pairs	149
Gowns	52
Vests	14

Baking.

Bread, loaves	6,111
Cookies	1,800
Cakes	51
Pies	121

Laundry.

Work done for officers	3,570
Work for girls	10,052

Average Price Paid from July 17 to September 30, 1907.

Flour, per barrel	\$4 63 $\frac{1}{3}$
Fresh beef, per lb	05 $\frac{1}{2}$
Ham, per lb	15

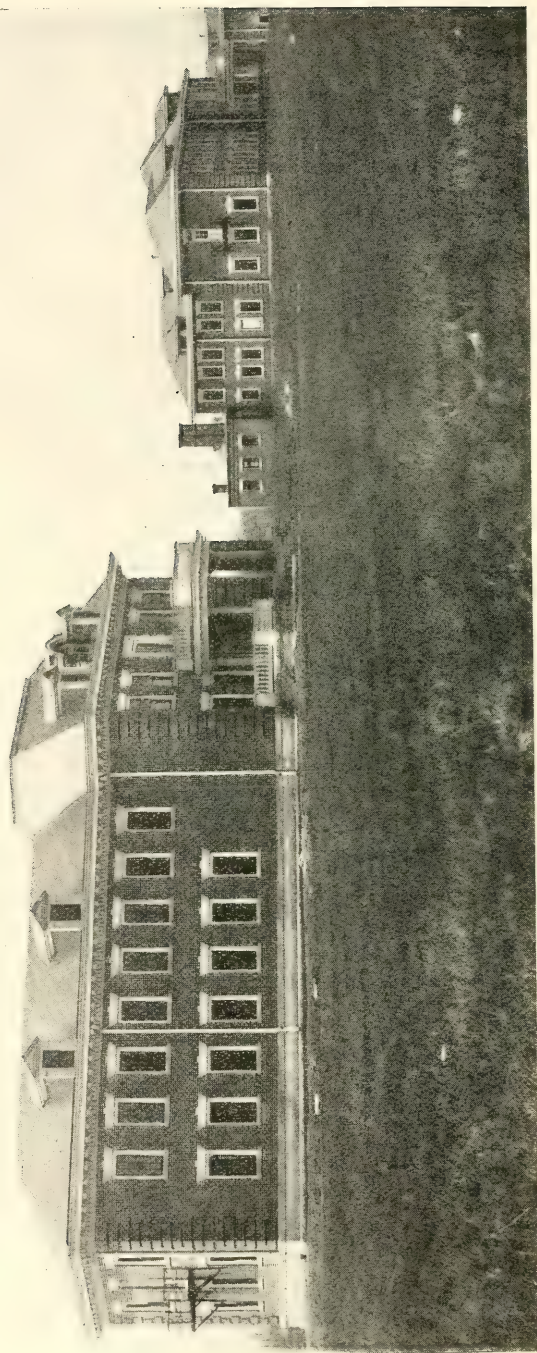
TABLE No. 8—Continued.

Pickled pork, per lb. ....	.....
Potatoes, per bushel	\$0 82½
Beans, per lb	03
Butterine, per lb.	10¾
Milk, per gallon	17
Tea, per lb.	20
Coffee, per lb.	12
Sugar, per 100 lbs.	5 25
Ice, per ton.	7 00

Products of Outdoor Labor.

Corn (sweet), 100 bu., at \$1.00 per bu.	\$100 00
Wheat, 1,072 bu., at 95c per bu.	1,018 40
Hay, 2 tons, at \$16.00 per ton.	32 00
Potatoes, 69 bu., at 75c per bu.	51 75
Tomatoes, 112 bu., at 75c per bu.	84 00
Beets, 70 doz., at 10c per doz.	7 00
Peppers, 10 doz., at 10c per doz.	1 00
Rhubarb, 15 doz., at 5c per doz.	75
Cucumbers, 23 doz., at 10c per doz.	2 30
Beans, 83 bu., at 50c per bu.	41 50
Cabbage, 23 bbls., at \$2.00 per bbl.	46 00
Squash, 42, at 5c each.	2 10
Pumpkins, 7, at 10c each.	70
Lima beans, 3 bu., at 75c per bu.	2 25
Onions, 25 bu., at \$1.50 per bu.	37 50
Pickles, 21 bu., at \$1 per bu.	21 00
Turnips, 2 bbls., at 75c per bbl.	1 50
Lettuce, 200 lbs., at 4c per lb.	8 00

Total	\$1,457 75
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COTTAGE STYLE D.

COTTAGE STYLE B

GIRLS INDUSTRIAL SCHOOL.

(1869 S., p. 61. In force May 13, 1869.)

8254. (6162) ESTABLISHED. 1. There shall be established as soon as possible after the taking effect of this act, at or near the city of Indianapolis, an institution to be known as the "Indiana Reformatory Institution for Women and Girls."

Diminution of time for good behavior.—Sections 8238-8241.

Home for friendless women.—Sections 8243-8350.

The penal department created by this act is a State Prison, and the act of April, 1881, concerning public offenses and their punishment, did not repeal any of the provisions of this act.—Walton v. State, 88 Ind. 9.

(Acts 1899, p. 22. In force February 7, 1899.)

8255. NAME CHANGED. 1. That the name of the State institution known as the Reform School for Girls and Women's Prison be changed. That hereafter, said institution shall be, and they are hereby declared to be separate and distinct; the first of said institutions to be named and known as the "Indiana Industrial School for Girls," the second institution to be named and known as the "Indiana Womans Prison."

8255a. LAWS APPLICABLE. 2. All laws in force respecting the said "Reform School for Girls and Womans Prison," including the management thereof, shall, as far as applicable thereto, apply and continue to these said separate institutions.

(1877, p. 64. In force March 3, 1877.)

8256. (6163) BOARD OF MANAGERS TO BE WOMEN—BOARD OF AUDIT. 2. The general supervision and government of said institution shall be vested in a Board of Managers consisting of three persons, who shall be women, to be known and designated as the "Board of Managers of the Indiana Reformatory Institution for Women and Girls." The members of the first board to be appointed under this act shall be Mrs. Emily A. Roache, Mrs. Rhoda M. Coffin and Mrs. Eliza Hendricks, whose terms of office shall be, respectively, two, four and six years, said terms of office to expire in the same order as the names occur in this act. As vacancies subsequently occur in the Board, their successors shall be appointed by the Governor, by and with the advice and consent of

the Senate, and shall hold their offices for the term of four years from their appointment, and until their successors are appointed and qualify. The term of each manager shall be designated in her certificate of appointment. Upon the expiration of the term of service of any member of the Board of Managers, one manager shall be appointed in the same manner, whose term of office shall continue four years from and after the expiration of the term of her predecessor, and until her successor is appointed and qualified. All vacancies in said Board shall be filled by appointment by the Governor subject to approval by the Senate at its next succeeding session. The person appointed to fill a vacancy, shall be entitled to hold her office for the unexpired portion of the term of the person whom she may be appointed to succeed. Said managers, before entering upon the discharge of their duties, shall take an oath or affirmation faithfully to perform the duties of their office; which oath or affirmation shall be filed and preserved in the office of the Secretary of State: Provided, however, That the Governor, Auditor and Secretary of State shall constitute a Board of Audit, whose duty it shall be to examine, audit and approve of the accounts and acts of said Board of Managers appointed under the provisions of this act.

(1869 S., p. 61. In force May 13, 1869.)

8257. (6164) PRESIDENT. 3. The said Board of Managers shall appoint one of their number as President of the Board.

8261. (6168) FEMALE SUPERINTENDENT AND OFFICERS—RULES. 7. Said Board of Managers may, with the approval of the Governor, appoint a suitable Superintendent of said institution, and all necessary subordinates (not exceeding a number to be fixed by the Governor), and fix their respective salaries, and shall have power, with the like approval, to make and enforce all such rules, regulations, ordinances and by-laws for the government and discipline of said institution, and for the admission of girls into the Reformatory Department thereof, as they may deem just and proper. The Superintendent and all the subordinate officers of said institution, shall be females: Provided, however, That if a married woman shall be appointed Superintendent or to any subordinate position, the husband of such appointee may, with the consent of the Board, reside in the institution, and may be assigned such duties or employment as the Board of Managers may prescribe.

8262. (6169) BOND OF SUPERINTENDENT. 8. Before entering upon the discharge of her duties, the Superintendent shall give bond to the State of Indiana, in the sum of ten thousand dollars or over, with security to be approved by said Board of Managers, conditioned for the faithful performance of her duties as such Superintendent, and that she will faithfully account for all moneys, property and effects intrusted to her as such, and shall take an oath or affirmation to discharge the duties of her said office with fidelity; and if said Superintendent shall be a married woman, such bond shall be executed by her husband and her sureties, but need not be signed by herself.

8263. (6170) DUTIES OF SUPERINTENDENT. 8. The Superintendent shall reside at the institution, and shall have the charge and custody of the buildings and other property thereof, and of the inmates who may be committed to both departments of the institution, and shall govern them in accordance with such rules and regulations as the Board of Managers may prescribe, and shall employ such methods of discipline as will as far as possible, reform the characters, preserve the health, promote regular improvement in the studies and industrial employments of the inmates of the institution, and secure them fixed habits of industry, morality and religion. The rules, regulation and discipline of each department of the institution shall be adapted to the character of the inmates thereof.

8264. (6171) INTEREST IN CONTRACTS. 9. No manager, officer or employe of said institution shall be personally interested, directly or indirectly, in any contract, purchase or sale made by or to or on behalf of said institution, or in any business carried on for or on behalf of said institution. All contracts, purchases or sales made in violation of this section shall be deemed and held null and void; and all money paid to such managers, officers, or employes, or to any person for their benefit, in whole or in part consideration of such purchase, contract or sale, may be recovered back by civil action, in the name of the State of Indiana against such manager, officer or employe, or against any person acting in her or his behalf, and it is hereby made the duty of the Governor and Board of Managers, upon satisfactory proof of such interest, to immediately remove such manager, officer or employe so offending, and to report the facts to the attorney-general, who shall take such legal steps in the premises as he may deem expedient.

8265. (6172) ANNUAL REPORT. 10. Said Board of Managers shall on or before the first day of January in each year, after the institution is open for the reception of inmates, make to the Governor a full and detailed report of their doings as such managers, and of the receipts and expenditures of such institution, with such other information relating to the condition of the institution and its inmates, and the results attained, as may be interesting or useful to the public; which report shall be communicated by the Governor to the General Assembly at the next succeeding session thereof.

8273. (6180) VICIOUS GIRLS RECEIVED FOR REFORMATION. 11. Whenever said institution shall have been proclaimed to be open for the reception of girls in the reformatory department thereof, it shall be lawful for said Board of Managers to receive into their care and management in the said reformatory department, girls under the age of fifteen years, who may be committed to their custody, in either of the following modes:

First, when committed by any judge of the Circuit Court, either in term time or in vacation, on complaint and due proof by the parent or guardian that by reason of her incorrigible or vicious conduct, she has rendered her control beyond the power of such parent or guardian and made it manifestly requisite that from a regard to the future welfare of such infant, and for the protection of society, she shall be placed under such guardianship.

Second. When such infant shall be committed by such judge as aforesaid, upon complaint of any citizen, and due proof of such complaint, that such infant is a proper subject for the guardianship of such institution, in consequence of her vagrancy or incorrigible or vicious conduct, and that from moral depravity or otherwise of her parent or guardian in whose custody she may be, such parent or guardian is incapable or unwilling to exercise the proper care or discipline over such incorrigible or vicious infant.

Third. When such infant shall be committed by such judge as aforesaid, on complaint and due proof thereof, by the township trustee of the township where such infant resides, that such infant is destitute of a suitable home and adequate means of obtaining an honest living, or that she is in danger of being brought up to lead an idle and immoral life.

8275. (E. S. 1998) COMMITMENTS. That commitments under existing law or laws which may be hereafter passed to the Reformatory Department of the institution, mentioned in section 1

of this act, may be made to read, for girls under eight nor over fifteen years of age.

8276. (E. S. 1999) **DETENTION AND RELEASE.** That all girls who may be now or hereafter committed to said Reform School by virtue of any existing law or laws, which may be hereafter passed, shall be detained in or committed to said Reform School until they respectively attain the age of twenty-one years: Provided, That the Board of Managers may release on parole all such girls at the age of eighteen years under such regulations as they may provide, which release shall remain in force during the good behavior of such girl or girls.

(1875, p. 73. In force August 24, 1875.)

8277. (6182) **DISCRETION TO SEND TO JAIL OR REFORMATORY.** If any girl under the age of sixteen years shall, under existing laws, or under those which may hereafter be enacted, be tried by any court of competent jurisdiction for any criminal offense for which she might, on conviction, be sentenced, for any period of time, to imprisonment in the proper county jail, it shall be competent for the court or jury by which the case may be tried, at their discretion, on conviction, to substitute confinement in the Reformatory Department of the institution created by this act for imprisonment in the county jail; and such confinement shall be until the infant attains the age of eighteen years, unless sooner lawfully discharged by the Board of Managers or otherwise.

Females over fifteen years of age may be sent to the county jail when the law so provides.—*Ruble v. State*, 52 Ind. 358.

(1869 S., p. 61. In force May 13, 1869.)

8278. (6183) **MAY BE SENT ON REPORT OF GRAND JURY.** If any girl under the age of fifteen years shall be accused before the Grand Jury of any crime or misdemeanor, and the charge is supported by evidence sufficient to put the accused upon trial, the grand jurors, in their discretion, instead of finding an indictment against the accused, may make a return to the court that it appears to them that the accused is a suitable person to be committed to the guardianship of the Reformatory Department of the institution, created by this act; and the court may, thereupon, order such commitment until the infant shall attain the age of eighteen years, unless sooner discharged as aforesaid, if satisfied from evidence adduced that such commitment ought to be made:

Provided, however, That the production of evidence may be weighed by the parent or guardian.

8279. (6184) MAY SEND TO REFORMATORY ON ARREST OF TRIAL. If any girl under the age of fifteen years shall be arraigned for trial before any court of competent jurisdiction, charged with the violation of any criminal law of this State, the judge of such court may, with the consent of the counsel, arrest at any stage of the cause, any further proceedings on the part of the prosecution, and commit the accused to the Reformatory Department of said institution until she shall attain the age of eighteen years, unless sooner lawfully discharged by the Board of Managers or otherwise.

8280. (6185) MAY SEND ON HABEAS CORPUS. When any girl under the age of fifteen years shall be imprisoned to await her trial on any charge punishable with imprisonment, such girl may be brought before the proper circuit judge, in term time or vacation, on a writ of habeas corpus, and shall be entitled to a private examination and trial before such judge with a view to the question whether such infant ought to be committed to said institution. Only the parties to the case and the parent or guardian of the accused shall be admitted to such examination, unless one of the parents, the guardian or the legal representatives of the accused shall demand a public trial; in which case all proceedings shall be in the usual manner. And upon such hearing, it shall be competent for such judge to make an order committing the accused to the Reformatory Department of said institution, until she attains the age of eighteen years, unless sooner lawfully discharged by the Board of Managers or otherwise.

8281. (6186) ORDER OF COMMITMENT. Whenever any infant under the age of fifteen years shall be committed to the Reformatory Department of said institution under the provisions of this act, the order of commitment shall be signed by the judge by whom it is made and authenticated by the clerk of the proper court, under the seal of the court. Such order shall state the name and age of the infant and the section of the act under which she may be committed, without setting forth or mentioning the offense with which she may be charged; and no other or further record of the proceedings shall be made, unless demanded by the infant or her parent or guardian. If, however, there shall be a regular trial and conviction, under section 21 of this act (p. 6182), the usual record

shall be made and a certified copy of the judgment shall constitute the order of commitment.

8282 (6187) SPECIFICATIONS IN COMMITMENT.

When a commitment shall be made under either of the specifications of section 19 of this act (p. 6180), the order of commitment shall also specify under which of the clauses or specifications of said section such order is made.

8283. (6188) REGULATIONS FOR DISCHARGE. The

Board of Managers of said institution may provide by general regulations for the discharge of girls committed to the Reformatory Department of said institution under any section or provision of this act, and such discharge shall be made by the Superintendent, with the approval of the Board.

8284. (6189) ESCAPE. Any person who may be committed to or confined in either department of said institution, and who may escape therefrom, may be arrested and returned to said institution by any officer or citizen, on the written order or request of the Superintendent or Board of Managers.

8285. (6190) EMPLOYMENT AND INSTRUCTION—APPRENTICESHIP. The Superintendent of said institution shall have power to place any girl committed to the Reformatory Department thereof at any employment, for account of the institution or otherwise, and cause her to be instructed in such branches of useful knowledge as such Superintendent may think proper; and shall also have the power to bind out such infant with her consent during her minority, and may execute indentures of apprenticeship for such infant which shall have the like force and effect as other indentures of apprenticeship made under the laws of this State. Every indenture of apprenticeship so made before the delivery thereof, shall be approved by the Board of Managers of such institution; which approval shall be endorsed on the indenture, and signed by the president of the Board, and a record of such approval shall be made in the minutes of the business transactions of the Board. In case any girl so apprenticed shall prove untrustworthy or unreformed, the Superintendent may permit her to be returned to the institution to be held in the same manner as before such apprenticeship, whereupon the indenture may be cancelled by order of the Board. If such infant shall have an unsuitable master or mistress, the Superintendent may, with the approval of the Board, take her back into the said institution with or without the consent

of such master or mistress; and thereupon the indenture shall be cancelled. All indentures so made, shall be filed and kept in said institution, and it shall not be necessary to file or record them in any other office or place, but the master or mistress of any girl so apprenticed shall, on request, be entitled to a copy of her indenture.

8286. (6191) **PAYMENT OF EXPENSES.** If any girl shall be committed to the Reformatory Department of said institution upon the complaint or at the instance of her parent or her guardian, the cost of transporting such girl to the institution and the cost of her subsistence and clothing, shall be paid by such parent or guardian, unless such parent is unable by reason of his or her poverty to pay the same, or unless such guardian has no funds, effects or estate of such infant out of which the same could be paid. The order of commitment shall in every such case state whether the parent is able to pay the cost of the subsistence and clothing of the infant, or whether the guardian has any estate or effects of the infant, out of which such costs can be paid. The Board of Managers shall in every case estimate and fix the amount to be paid and the same shall be paid to the Superintendent quarterly in advance.

8287. (6192) **ESTIMATES—COUNTY TO PAY HALF.** Said Board of Managers shall, with the approval of the Governor, estimate and determine as near as may be, the actual expense per annum of clothing and subsisting an infant committed to the Reformatory Department of said institution, and include a statement of such estimated price in each annual report. One-half of the cost of the keeping, according to such estimates, together with the entire cost of conveying such infant to the institution, shall be paid by the county from which such infant may be committed, except in cases where the cost of transporting such infant to the institution and her subsistence is chargeable to her parents or guardian under the last preceding section.

8288. (6193) **PAYMENT BY COUNTY.** The expense which any county may be liable to pay for the clothing and subsistence of any girl committed to the Reformatory Department of said institution, under the provisions of this act, shall be paid by the Board of County Commissioners of such county into the state treasury on a certified statement in detail of the amount due therefor from such county being transmitted by the Superintendent of the institution through the treasurer of the State to the auditor of the proper county.

8290. (6195) PARENT'S PROCEEDINGS—DISCHARGE.

If a parent, guardian, or master of any infant committed to the Reformatory Department of said institution, or any person occupying the position of parent or guardian in fact, or any relation by blood or marriage, not more remote than first cousin to such infant, shall feel aggrieved by the commitment of such infant to such institution, he may make written application to the Board of Managers of said institution for the discharge of such infant, which application shall be filed with the Superintendent, who shall inform the managers thereof; and the same shall be heard and determined by said managers at such time as they shall appoint for that purpose, not later than the next regular meeting of the Board. Such application shall state the grounds of the applicant's claim to the custody of the infant and the reasons for claiming such custody. Within ten days after the hearing of such application the Board of Managers shall make and announce their decision thereon; and if they shall be of the opinion that the welfare of such infant would be promoted by granting the application, they shall make an order to that effect; otherwise, they shall deny the application. The applicant, upon the denial of the application (by first giving security for the payment of all costs, the security to be approved by the clerk of the proper court), may commence an action in the Circuit Court of the county in which the institution may be situated, for the recovery of the custody of such infant against the managers of the institution. The complaint in said action shall state the facts and manner of the commitment, the making of the plaintiff's application to the managers for the custody of such infant, and the denial of such application by said managers, as well as the ground upon which the plaintiff relies for the recovery of the custody of such infant. Said action shall be prosecuted in like manner as other civil actions; and the cost thereof shall be paid by the plaintiff without reference to the result of the action, unless the court shall state in the judgment that refusal of managers to grant the application of the plaintiff was plainly unreasonable, or that the original commitment was manifestly unnecessary and improper.

8291. (6196) GOVERNOR MAY COMMUTE. Whenever any female under the age of fifteen years shall be sentenced by any court of competent jurisdiction to imprisonment in any county jail, it shall be lawful for the Governor, on the application of such infant, parent, guardian or any other person, to commute her punishment by substituting therefor the commitment of such infant to the

Reformatory Department of the institution created by this act during the minority of such infant unless sooner lawfully discharged by the Board of Managers, or otherwise.

8293. (6198) INSTRUCTION. It shall be the duty of said Board of Managers to provide teachers and, as far as practicable, instruct the inmates of said institution in reading, writing and arithmetic.

(1873, p. 139. In force February 3, 1873.)

8294. (6199) FURNISHING. Whenever said institution, or any portion or department thereof, is ready to be furnished, the Board of Managers thereof shall present to the Auditor of State, an itemized estimate of the articles needed for that purpose, with the estimated cost of each item or article, which estimate or statement shall be verified by the oath of the president of said Board. Upon the presentation of said estimate or statement to the Auditor of State, said auditor shall, as soon as practicable, notify the Governor, Secretary and Treasurer of State of the filing of such statement, and if a majority of said officers shall be of the opinion that the proposed expenditure or some part thereof is necessary for the proper furnishing of said institution, or any part or department thereof, they shall direct in writing the Auditor of State to draw his warrant for the amount so estimated or such part or portion thereof as they may approve, on the Treasurer of State, who shall pay the same to the president of said Board, or to her order out of any money in the treasury not otherwise appropriated.

8295. (6200) CURRENT EXPENSES. The current expenses of said institution shall be estimated for, allowed and drawn from the treasurer as follows: At the commencement of each month the Superintendent shall prepare and verify by her oath an estimated itemized statement in writing of the amounts that will be required to meet the current expenses of such institution during such month and present the same to the Auditor of State, who shall notify the Governor, Secretary and Treasurer of State thereof; and if a majority of said officers shall approve and allow said estimate or a part thereof, they shall direct in writing the Auditor of State to draw his warrant on the Treasurer of State for the amount which may be so allowed by said State officers or by a majority of them; and said treasurer shall pay said warrant out of any moneys in the treasury not otherwise appropriated. Every such estimated itemized statement shall set forth the number of the inmates in each of the departments of the institution, and also the number of the officers and persons employed therein.

8296. (6201) SEMI-ANNUAL REPORT. The Board of Managers and Superintendent of said institution shall, at the end of every period of six months (commencing with the first money which may be drawn from the treasury on any estimate made under either of the previous sections of this act), make an itemized report of the expenditure of the money which may have been so drawn from the treasurer under this act; and the auditor shall carefully examine such report and if in his opinion any money shall have been improperly expended in the purchase of unnecessary articles or by paying too much therefor or otherwise, said auditor shall immediately notify the Governor, Secretary and Treasurer of State, who in conjunction with such auditor shall immediately proceed to investigate the matter and in accordance with the decision of a majority of these officers the amount shall be audited: Provided, however, That before rendering an adverse decision upon any such amount or any part thereof, they shall notify the disbursing officer and allow her to present such explanations or adduce such testimony as she may desire in regard to the matter, and they shall have the same power to summon and require the attendance of witnesses as are given to the circuit courts of this State.

(Acts 1903.)

COMMITMENTS. Section 1. Be it enacted by the General Assembly of the State of Indiana. That section 19 of the above entitled act be amended to read as follows: Section 19. Whenever said institution shall have been proclaimed to be open for the reception of girls in the Reformatory Department thereof, it shall be lawful for said Board of Managers to receive into their care and management in the said Reformatory Department, girls under the age of fifteen years who may be committed to their custody in either of the following modes, to wit:

First. When committed by any judge of the circuit court, either in term time or in vacation, on complaint and due proof by the parent or guardian that by reason of her incorrigible or vicious conduct she has rendered her control beyond the power of such parent or guardian and made it manifestly requisite that from regard to the future welfare of such infant, and for the protection of society, she should be placed under such guardianship.

Second. When such infant shall be committed by such judge as aforesaid upon complaint by any citizen and due proof of such complaint that such infant is a proper subject for the guardianship of such institution in consequence of her vagrancy or incorrigible or vicious conduct, and that from moral depravity or other-

wise of her parent or guardian in whose custody she may be, such parent or guardian is incapable or unwilling to exercise the proper care or discipline over such incorrigible or vicious infant.

Sec. 2. All laws or parts of laws in conflict with this act are hereby repealed.

Sec. 3. Whereas, an emergency exists for the immediate taking effect of this act, the same shall be in force from and after its passage.

(Acts 1903, s. 1, p. 524.)

SEPARATION OF INDUSTRIAL SCHOOL FOR GIRLS AND WOMANS PRISON.

The Indiana Industrial School for Girls shall be separated from the Womans Prison and there shall be constructed for the use of the Indiana Industrial School for Girls, buildings separate and widely apart from those now used by the Industrial School for Girls and Womans Prison.

(Acts 1903, s. 13, p. 526.)

There is hereby appropriated from the State treasury, out of any funds not otherwise appropriated, one hundred and fifty thousand dollars (\$150,000), or so much thereof as may be necessary for the purchase of the ground, erection and equipment of the buildings and expenses of the commissioners authorized by this act, one hundred thousand dollars of which shall be available on and after June 1, 1903, and the remaining \$50,000 shall be available after November 1, 1903. The work shall be completed and turned over to the Board of Managers of the Industrial School for Girls, hereinafter provided for, on or before October 31, 1904. When this shall have been done by said commissioners and final settlement made with the Auditor of State, then the duties of said commissioners shall end.

(Amendment to above section.)

SEPARATION AND APPROPRIATION. There is hereby appropriated from the State treasury out of any funds not otherwise appropriated, two hundred thirty-five thousand dollars (\$235,000), or so much thereof as may be necessary for the erection and equipment of the buildings and expense of the commissioners authorized by this act; seventy-five thousand (\$75,000) of which shall be available on and after June 1, 1905, and the remaining one hundred sixty thousand dollars (\$160,000) shall be available on and after November 1, 1905. The said buildings shall be erected and

equipped and made ready for occupancy as soon as practicable, and when completed, turned over to the Board of Managers of the Industrial School for Girls provided for in this act.

(Acts 1907, s. 1, p. 138.)

BOARD OF TRUSTEES. The Board of Trustees of the Indiana Industrial School for Girls shall hereafter consist of four members. Upon the expiration of the term of any member of said Board, or upon a vacancy occurring, the Governor shall appoint a successor to such member, except as herein otherwise provided. All appointments shall be for a term of four years, respectively, excepting in case of vacancy by death, removal or resignation, they shall be for the unexpired term. In making all appointments referred to in this section, the Governor, in addition to the qualifications hereinafter mentioned, shall take into consideration the political affiliation and belief of such appointees, so that not more than two of the members of said Boards respectively shall be members of the same political party or have the same political affiliation or belief. * * *

Sec. 2. NAME OF INSTITUTION CHANGED. The name of the Indiana Industrial School for Girls is hereby changed to the Indiana Girls School.

(Acts 1907, Sec. 4, p. 140.)

TRUSTEES — QUALIFICATIONS — BOND — REMOVAL. The Board of Trustees of the Indiana Girls School shall consist of women only. * * * No other qualifications, except fitness and those hereinbefore specified, shall be considered in the making of such appointments. Each member of any such board of trustees hereafter appointed shall qualify by giving a bond with surety in the sum of ten thousand dollars (\$10,000) to the approval of the Governor. At the meeting of said boards following the appointments provided for in section one (1) of this act, they shall proceed to elect a president, vice-president, treasurer and secretary, and thereafter annually, the organization shall be at the April meeting of said Board. Such treasurer shall qualify by executing a bond in the sum of fifty thousand dollars (\$50,000), with surety to the approval of the Governor. The Governor may remove any of such trustees for misconduct or neglect of duty after an opportunity to be heard upon written charges. The Board of Trustees of any institution shall have the right to condemn property for the convenience or the necessary purposes of such institution. Con-

demnation proceedings shall be conducted pursuant to the statutes relating to the exercise of the power of eminent domain.

COMPENSATION—INTERESTS IN CONTRACTS. Such trustees shall receive as compensation \$300 a year each, and their reasonable expenses, not to exceed \$125 a year each, which shall be paid quarterly as other expenses of the institution are paid. No person shall be eligible to be appointed a member of any of the boards of trustees referred to in this act, who is a contractor with the institution of whose board he or she is a member, or who is interested either directly or indirectly in any contract with or in furnishing any of the supplies for such institution, and if any person appointed under the provisions of this act shall become so interested during his or her term of office, such interest shall vacate his or her office and his or her successor shall be immediately appointed as hereinbefore provided to fill his or her unexpired term.

EMPLOYES. * * * All officers and employes of each institution shall be selected and appointed by the Superintendent or head of the institution and shall be removable at his or her pleasure, and all such officers and employes shall be appointed regardless of political or religious affiliation on the basis of fitness after examination as to their qualifications for the duties to be performed under such rules and regulations as may be prescribed by the Board. The annual compensation of Superintendent or head of an institution and the number of officers and employes, their duties and compensations, shall be fixed by the Board of Trustees at its discretion and said trustees are hereby forbidden to solicit or request or in any way interfere with the appointment or discharge of any officer or employe.

SUPPLIES—PURCHASE—BIDS. In the purchase of all supplies that enter into the maintenance of any of the institutions covered by this act, it shall be the duty to invite competitive bids through sealed proposals to the president of the board of each institution and the lowest and best responsible bidder shall be awarded the contract and the same provision shall apply to the construction and equipment of all buildings for any such institution. Public notice of such bids shall be given by publication in the two leading newspapers in the county where such institution is located, and otherwise if considered beneficial. If such board deems it advisable and in the interest of economy to buy certain articles in quantity to last for a longer period, it shall have the

right to do so. Such fact, however, shall be particularly stated in the notices. Blank bids shall be furnished for all applicants, but bids shall not be rejected because not contained on such form. Any or all bids may be rejected.

ANNUAL REPORTS. Annual reports, uniform in character, shall be made by such boards to the Governor, and shall be printed. Such institutions shall be conducted upon a thorough, non-partisan basis.

(Acts 1907, p. 669.)

APPROPRIATION. Maintenance, thirty-eight thousand dollars, and one hundred fifty dollars per capita per annum for each person actually present over a daily average number of two hundred and fifty-three girls each month, which sum is hereby appropriated out of any money in the treasury not otherwise appropriated; said excess amount to be approved by the board of state charities. Discharge, clothing and parole, seven hundred dollars; library, three hundred dollars. Specific. One new cottage, twenty-five thousand dollars; two employes' cottages for men, at two thousand dollars each, four thousand dollars; cow barn and horse barn, three thousand dollars; store house and cold storage, six thousand five hundred dollars; fence, two thousand dollars; henery and piggery, five hundred dollars; grading walks, drives, roads, improving grounds and planting trees, five thousand dollars; furnishing and installing boiler, engine and generator, switchboard and all necessary appliances, equipments, materials and labor, five thousand seven hundred and fifty dollars; one standpipe, two thousand dollars; live stock, vehicles, harness, implements and necessary utensils, three thousand dollars, the same to be available immediately. Thirty thousand dollars to be expended in furnishing and equipment of buildings now or hereafter to be constructed, to be available upon the taking effect of this act: Provided, That out of such sum of thirty thousand dollars, six thousand dollars, or so much thereof as may be necessary, shall be used for paying for pumps, air lift and equipment, architects' fees, cistern, salary of superintendent of construction and such unpaid expenses of the commissioners as are authorized by law.

